


# Bryn Mawr

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The Graduate School of  
Arts and Sciences  
Catalogue and Calendar | 1988–90



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# Bryn Mawr

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## **The Graduate School of Arts and Sciences**

### **Catalogue and Calendar**

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# Graduate Work at Bryn Mawr

Graduate students at Bryn Mawr are members of a small scholarly community in which they work as apprentices and junior scholars in close cooperation with faculty. In most departments, programs are designed for each graduate student according to individual interests, preparation, and experience, and a student's program may well cross departmental lines. The work is organized in the form of seminars, graduate courses, and individual supervised study.

Founded in 1885, the Bryn Mawr Graduate School was the first graduate school for women in the United States. Since 1931 both men and women have been admitted. In 1970 the Graduate School of Arts and Sciences and the Graduate School of Social Work and Social Research were organized as two distinct schools. Today, the total student enrollment in the Graduate School of Arts and Sciences is approximately three hundred.

Students are accepted for graduate work leading to either or both the Master of Arts and Doctor of Philosophy in the following departments or programs:

|                               |                          |
|-------------------------------|--------------------------|
| <i>Biochemistry</i>           | <i>Geology</i>           |
| <i>Biology</i>                | <i>Greek</i>             |
| <i>Chemistry</i>              | <i>History of Art</i>    |
| <i>Classical and Near</i>     | <i>Human Development</i> |
| <i>Eastern Archaeology</i>    | <i>Latin</i>             |
| <i>Classical Languages</i>    | <i>Mathematics</i>       |
| <i>Classical Studies</i>      | <i>Physics</i>           |
| <i>Clinical Developmental</i> | <i>Psychology</i>        |
| <i>Psychology</i>             | <i>Russian</i>           |

Pending a decision on the size of the graduate enterprise at Bryn Mawr, applications from outside students for graduate work beginning in 1988-89 are not being accepted in the following departments:

|                     |                   |
|---------------------|-------------------|
| <i>Anthropology</i> | <i>History</i>    |
| <i>English</i>      | <i>Philosophy</i> |
| <i>French</i>       | <i>Spanish</i>    |

# College Calendar 1988-89

## The Graduate School of Arts and Sciences

### First Semester 1988-89

- Aug. 20 *Final date for filing completed applications for admission for 1988-89 for all departments except Department of Human Development (February 1 deadline)*
- Sept. 2 *Graduate residence (Glenmede) opens*
- Aug. 31- *Registration period for Semester I*
- Sept. 6
- Sept. 6 *Convocation*  
*Work of the 104th academic year begins at 9 a.m.*
- Oct. 14 *Fall break begins after last class*
- Oct. 17 *Ph.D. dissertations in all fields except natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the December 15 degree*
- Oct. 19 *Fall break ends at 9 a.m.*
- Nov. 7 *Ph.D. dissertations in the natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the December 15 degree*
- Nov. 28 *Last day for final Ph.D. oral examinations for the December 15 degree*
- Nov. 23 *Thanksgiving holiday begins after last class*
- Nov. 28 *Thanksgiving holiday ends at 9 a.m.*
- Dec. 6- *Registration period for Semester II*
- Dec. 8
- Dec. 12 *Perfect copies of all dissertations must be deposited in the Graduate Office for the December 15 degree*
- Dec. 13 *Last day of classes, Semester I*
- Dec. 15 *Ph.D. degrees conferred*
- Dec. 23 *Winter vacation begins*

### Second Semester 1988-89

- Jan. 10 *Final date for filing completed applications for admission for Semester II*

- Jan. 23 Convocation  
*Work of Semester II begins at 9 a.m.*
- Jan. 25 *Final date for foreign students to file completed applications for financial aid and awards for 1989-90 and for Special Foreign Language Fellowship applications (new and continuing students)*
- Jan. 30 *Application for M.A. candidacy due in the Office of the Graduate School of Arts and Sciences*
- Feb. 1 *Final date for all applications for financial aid for 1989-90 (new and continuing students)*
- Feb. 1 *Final date for filing completed applications for admission in the Department of Human Development for 1989-90*
- Mar. 10 *Spring vacation begins after last class*
- Mar. 20 *Spring vacation ends at 9 a.m.*
- Mar. 21 *Ph.D. dissertations in all fields except natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the May 1989 degree*
- Apr. 10 *Ph.D. dissertations in the natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the May 1989 degree*
- Apr. 21 *M.A. theses due for candidates away from Bryn Mawr (Candidates at Bryn Mawr should consult their department chairmen)*
- Apr. 21 *Final date for Ph.D. preliminary examinations for 1988-89 academic year*
- May 5 *Last day of classes*
- May 8 *Last date for final Ph.D. oral examinations for the May 1989 degree*
- May 15 *Last date for final written M.A. examinations for the May 1989 degree*
- May 17 *Perfect copies of all dissertations must be deposited in the Graduate Office for the May 1989 degree*
- May 21 *Conferring of degrees and close of 104th academic year*
- June 1 *Deadline for applications for National Direct Student Loans for the 1989-90 academic year*
- Aug. 20 *Final date for filing completed applications for admission for 1989-90 for all departments except Department of Human Development (February 1 deadline)*



# College Calendar 1989-90

## The Graduate School of Arts and Sciences

### First Semester 1989-90

- Aug. 20 *Final date for filing completed applications for admission for 1989-90 for all departments except Department of Human Development (February 1 deadline)*
- Sept. 1 *Graduate residence (Glenmede) opens*
- Sept. 1- *Registration period for Semester I*
- Sept. 6
- Sept. 5 *Convocation*  
*Work of the 105th academic year begins at 9 a.m.*
- Oct. 13 *Fall break begins after last class*
- Oct. 18 *Fall break ends at 9 a.m.*
- Oct. 16 *Ph.D. dissertations in all fields except natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the December 15 degree*
- Nov. 6 *Ph.D. dissertations in the natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the December 15 degree*
- Nov. 27 *Last day for final Ph.D. oral examinations for the December 15 degree*
- Nov. 22 *Thanksgiving holiday begins after last class*
- Nov. 27 *Thanksgiving holiday ends at 9 a.m.*
- Dec. 5- *Registration period for Semester II*
- Dec. 7
- Dec. 11 *Perfect copies of all dissertations must be deposited in the Graduate Office for the December 15 degree*
- Dec. 12 *Last day of classes, Semester I*
- Dec. 15 *Ph.D. degree conferred*
- Dec. 22 *Winter vacation begins*

### Second Semester 1989-90

- Jan. 10 *Final date for filing completed applications for admission for Semester II*

- Jan. 22 Convocation  
*Work of Semester II begins at 9 a.m.*
- Jan. 25 *Final date for foreign students to file completed applications for financial aid and awards for 1990-91 and for Special Foreign Language Fellowship applications (new and continuing students)*
- Jan. 29 *Application for M.A. candidacy due in the Office of the Graduate School of Arts and Sciences*
- Feb. 1 *Final date for all applications for financial aid for 1990-91 (new and continuing students)*
- Feb. 1 *Final date for filing completed applications for admission in the Department of Human Development for 1990-91*
- Mar. 9 *Spring vacation begins after last class*
- Mar. 19 *Spring vacation ends at 9 a.m.*
- Mar. 20 *Ph.D. dissertations in all fields except natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the May 1990 degree*
- Apr. 9 *Ph.D. dissertations in the natural sciences must be submitted to the Office of the Graduate School of Arts and Sciences for the May 1990 degree*
- Apr. 20 *M.A. theses due for candidates away from Bryn Mawr (Candidates at Bryn Mawr should consult their department chairmen)*
- Apr. 20 *Final date for Ph.D. preliminary examinations for 1989-90 academic year*
- May 4 *Last day of classes*
- May 7 *Last date for final Ph.D. oral examinations for the May 1990 degree*
- May 14 *Last date for final written M.A. examinations for the May 1990 degree*
- May 16 *Perfect copies of all dissertations must be deposited in the Graduate Office for the May 1990 degree*
- May 20 *Conferring of degrees and close of 105th academic year*
- June 1 *Deadline for applications for National Direct Student Loans for the 1990-91 academic year*
- Aug. 20 *Final date for filing completed applications for admission for 1990-91 for all departments except Department of Human Development (February 1 deadline)*

## Resources for Graduate Work at Bryn Mawr

The Mariam Coffin Canaday Library and the six auxiliary libraries of Bryn Mawr College, including the Art and Archaeology Library in the M. Carey Thomas Library, contain more than 850,000 books, documents, and microforms, and regularly receive more than 2,100 periodicals as well as many scholarly series. The library is open throughout the year with a liberal schedule of hours. Books are readily accessible on open stacks and in study rooms; individual carrels are available for advanced students.

The John D. Gordan Reference Center provides a focus for reference books and services. In its card catalogue, the main entry cards of the Haverford College Library join those of the Bryn Mawr Library, thus bringing more than a million entries into one file. The library is a member of the Pennsylvania Area Library Network (PALINET) and holds, with Haverford and Swarthmore Colleges, the microfilm of the Union Library Catalogue of Pennsylvania, which locates approximately 7,200,000 volumes in the Philadelphia area and in the state, including the libraries of the American Philosophical Society, the Library Company of Philadelphia, the Historical Society of Pennsylvania, the Academy of Natural Sciences, the Free Library of Philadelphia, the Franklin Institute, the College of Physicians, the Rosenbach Foundation, the University of Pennsylvania, and Temple University. In addition, through PALINET, the Library has access to the OCLC data bank of more than 17,500,000 titles catalogued for libraries throughout the United States.

The Rare Book Room houses the Marjorie Walter Goodhart Medieval Library of incunabula and medieval manuscripts. Important and extensive collections of early material on Latin America, Africa, and Asia are to be found in the Dillingham, McBride, and Plass Collections. The Castle and Adelman Collections expand the opportunities for the study of the graphic book-arts. The Adelman Collection also substantially increases the library's holdings of literary and related manuscripts. The archives, including the papers of M. Carey Thomas, are a valuable source and provide a focus for the history of women and women's education. In addition to these special collections are numerous other rare books and manuscripts.

Research services provided by the reference staff include online bibliographic searching, as well as access to extensive

research materials in both traditional and electronic formats. The Bryn Mawr, Haverford, and Swarthmore College Libraries are in the initial stages of implementation of an integrated online library information system which will contain complete bibliographic and circulation data for the holdings of the three colleges.

Bryn Mawr has a study collection of archaeological and ethnological materials which is used for research by graduate and undergraduate students. The Ella Riegel Museum of Classical Archaeology contains examples of the Greek and Roman arts, especially vases, and a small group of pre-classical antiquities. It includes the classical Greek coins assembled by Elisabeth Washburn King and the Aline Abaecherli Boyce Collection of Roman Republican silver coins as well as the Densmore Curtis Collection presented by Clarissa Dryden. Professor Hetty Goldman donated an extensive series of pottery samples from the excavations at Tarsus in Cilicia. Old World Paleolithic, Neolithic, Eastern Woodland, Southwestern, Middle Mississippian, and Mexican antiquities are represented at Bryn Mawr, and the Ward Canaday collection provides outstanding examples of most of the known ceramic and textile traditions of Peru.

In addition, students in archaeology and history of art use the resources of the Philadelphia area: the Philadelphia Museum of Art, the Pennsylvania Academy of the Fine Arts, the Barnes Foundation, the Rodin Museum, the Rosenbach Museum, and the University Museum of the University of Pennsylvania.

Laboratories and classrooms for anthropology and psychology are in Dalton Hall. Laboratories, classrooms, and libraries for biochemistry, biology, chemistry, geology, mathematics, and physics are located in the three buildings of the Science Center. At the Center are rooms designed for working with radioactive materials, for photomicrography and for glassblowing; there is a machine shop with expert instrument makers in charge and a workshop available to graduate students. In addition to the usual equipment, special apparatus and instruments for particular research projects involving faculty and graduate students continue to be acquired through the Fund for the Coordination of the Sciences (see page 97), through research grants from industry and other private sources, and from government agencies.

The Department of Geology has valuable materials for research, including the extensive working and reference mineral collections of Theodore D. Rand and George Vaux, Jr. The department is also a map repository for the United States Geological Survey and the Defense Mapping Agency.

A new Computing Center, located between Denbigh and Dalton Halls, was opened in the fall of 1986 to house both the academic and administrative computing departments. The center features expansive underground work space, offices, and a library, all surrounding a sunken atrium. The new center is open seven days a week. A Digital Vax 8200, a Hewlett Packard 9000, and a Digital Micro Vax II are linked on an Ethernet Local Area Network "backbone" and are accessible via a campus-wide AT&T Information Systems Network (ISN) for use in academic and research computing. The network facilitates computer work rooms in Thomas, Dalton, and the Science Center, as well as classroom and administrative offices in Taylor Hall. Word processing is done on AT&T PC6300's and Apple Macintoshes linked on an AppleTalk network to LaserWriter printers, to provide state-of-the-art microcomputer word processing facilities. The software available includes Pascal, C, and Fortran compilers, SPSS<sup>x</sup> and BMDP statistical packages, TSP for econometrics, and IMSL, a mathematical and statistical library for programmers, and the Precision Visuals graphics libraries.



# **Admission to the Graduate School of Arts and Sciences**

## **Requirements**

Applicants are expected to be graduates of colleges or universities of acknowledged standing. For special requirements set by individual departments, see the departmental listings beginning on page 23.

## **Procedure**

The applicant should write to the Graduate Admissions Office, Graduate School of Arts and Sciences, Bryn Mawr College, Bryn Mawr, Pennsylvania 19010 for application forms, indicating the field of special interest. The application itself must be supported by official transcripts of the student's complete academic record and by letters from professors with whom he or she has done the major work.

Although an interview is not required, candidates are strongly encouraged to come in person to discuss their plans and the Bryn Mawr program. The applicant should write directly to the chairman of the department to arrange a meeting.

No application will be considered until all the necessary documents have been received. Students are accepted for either full-time or part-time work. There is an application fee of \$30 which is not refundable.

## **Graduate Record Examinations**

Applicants must take the Graduate Record Examination Aptitude Test and, in certain instances, the Advanced Tests in their field of special interest. See the departmental listings. Inquiries concerning the Graduate Record Examinations and the dates on which they will be given should be addressed to Graduate Record Examination, Educational Testing Service, CN 6000, Princeton, New Jersey 08541-6000 or to Graduate Record Examination, Educational Testing Service, 1947 Center Street, Berkeley, California 94704.

## Dates

### 1. *Citizens of the United States and permanent residents:*

The closing date for applications for admission is August 20, except for the Department of Human Development which has a closing date of February 1.

### 2. *Foreign applicants:*

The closing date for applications for admission is August 20, except for the Department of Human Development which has a closing date of February 1. Applications from individuals whose native language is not English *must* include the scores of the Test of English as a Foreign Language (TOEFL), the Examination of the English Language Institute of the University of Michigan, or another approved language test. Since applications from foreign students desiring financial aid must be completed by January 25, those applicants must arrange to take language tests well before that date. For information concerning the TOEFL and the dates on which it is given, write to: TOEFL, Educational Testing Service, Princeton, New Jersey 08541. Foreign applicants desiring financial aid should also arrange to take the Graduate Record Examination no later than October of the application year.

### 3. *Applicants for admission with financial aid:*

Students wishing to apply for fellowships, scholarships, tuition grants, or other forms of financial aid must present completed applications by the following dates:

|  |            |
|--|------------|
| Foreign citizens or applicants for Special |            |
| Foreign Language Fellowships .....         | January 25 |
| All other applications .....               | February 1 |

Note that individuals applying after these deadlines may in some instances be considered for teaching or graduate assistantships, if vacancies occur, but all other opportunities are closed on the dates indicated.

Also note that all U.S. citizens and permanent residents are required to complete GAPS FAS forms in connection with their applications for financial aid, and that these forms must be submitted to GAPS FAS, Educational Testing Service, CN6660, Princeton, New Jersey 08541-6660 by January 15 (see page 92).

## **Admission to Graduate Seminars and Courses**

Admission to graduate seminars and courses is under the jurisdiction of the various departments. Students whose preparation is inadequate may be required to enroll as special students to take appropriate undergraduate courses for which no graduate credit is given. At the end of one or two semesters the department reviews the work of the special student and makes a recommendation to the dean concerning the student's admission to the regular graduate program.



# **Requirements for Registration and Degree Candidacy**

## **Registration**

All graduate students, after consultation with the chairman of their department, must register at the office of the Graduate School of Arts and Sciences in Taylor each semester during the registration period listed in the College calendar. Changes in registration require the approval of the department chairman and the dean and may, in some instances, involve fees or penalty charges (see Appendix B). Changes in registration should not be made after the third week of classes in a semester.

Personal registration is an important obligation of the graduate student. Those who fail to register in the stated period will be charged a late registration fee.

## **Degree Candidacy**

Admission to the Graduate School of Arts and Sciences to work toward an M.A. or Ph.D. degree does not automatically confer candidate status. Graduate students formally become candidates for the M.A. or Ph.D. only after they have met departmental requirements and have made formal application for candidacy which has been approved by their department and then by the Council of the Graduate School of Arts and Sciences.

## **Leaves of Absence**

Students wishing to discontinue their graduate work for a period of time should consult their department chairman and notify the Graduate School. There are no leave restrictions except in the case of those who have been formally admitted to candidacy for the Ph.D. It should be noted, however, that all work for the degree of Master of Arts must be completed within a period of five years.

Students who have been formally admitted to candidacy for the degree of Doctor of Philosophy may be granted leave of absence by the dean of the Graduate School of Arts and Sciences, with the approval of the department, for a semester or a full

academic year, and leave may be renewed for an additional period, provided that the total does not exceed two academic years. Leaves of absence exceeding a total of two academic years can be granted to Ph.D. candidates only with the approval of the department, the dean of the Graduate School of Arts and Sciences, and the Council of the Graduate School of Arts and Sciences, and will be granted only in the case of exceptional circumstances and demonstrated financial hardship. No fee is required of students granted leaves of absence, but students should recognize that leaves of absence may affect loan repayment obligations.

Note: Students with loans should consult the Financial Aid Office concerning the rules regulating obligations in the case of leave.

## **Continuing Enrollment**

All graduate students, whether or not formally admitted to candidacy for the Ph.D., must register for one or more units of work or enroll under the continuing enrollment plan if they plan to present themselves for College examinations, or to use the College libraries or laboratories, or to consult members of the faculty in relation to work in progress.

Students who have been formally admitted to candidacy for the Ph.D. must, in order to retain their candidacy, register for one or more units of work each semester, or enroll under the continuing enrollment plan, unless granted formal leave.

Enrollment under the continuing enrollment plan does not carry academic credit, but permits the student to be certified as at least a half-time student. Departments must certify annually that students so enrolled are making adequate progress.

## Program of Study

The program of study consists of selected seminars, courses, or individual work under the close direction of members of the faculty. At Bryn Mawr College, the program in the Graduate School of Arts and Sciences is defined in terms of academic units. Six academic units constitute a full year's program. A year-long seminar counts as two academic units; a one-semester seminar, or an upper-level undergraduate semester course taken for graduate credit, or a semester of supervised independent work counts as one unit.

A minimum of six academic units at Bryn Mawr is required for the degree of Master of Arts. Candidates for the degree of Doctor of Philosophy must complete a minimum of twelve academic units at Bryn Mawr. Some departments or programs require additional units for the Ph.D.

Active engagement in research and the development of advanced research skills are required for all graduate degrees in Arts and Sciences at Bryn Mawr. For specific requirements in the sciences, see the individual departmental sections.

Prospective students who have already completed an M.A. at another institution should consult the department chairman to ascertain whether or not this will make a difference to their Bryn Mawr program.

Under the Reciprocal Plan, courses at the University of Pennsylvania Graduate School of Arts and Sciences are available to Bryn Mawr graduate students and may be counted toward the Bryn Mawr degree. All matriculated graduate students are eligible. The number of courses which may be taken at the University is limited to the equivalent of two units per year or one-third of a student's program, and no more than one course per semester. The procedure for registration and payment of tuition fees is the same as for students enrolled wholly at Bryn Mawr, with the exception that the student must present a letter of introduction to the dean of the Graduate School of Arts and Sciences of the University of Pennsylvania when registering there. Ordinarily students are not advised to undertake such work during their first year at Bryn Mawr. Since the fall of 1987 a similar Reciprocal Plan exists with the Graduate School of Drexel University.

For graduate students in the biological sciences there is, in addition, a Reciprocal Plan with the Medical College of Pennsylvania. See page 32 for a full description.

The Philosophy Consortium provides a Reciprocal Plan for graduate students in philosophy at Bryn Mawr, Temple University, Villanova University, and the University of Pennsylvania. Bryn Mawr graduate students in philosophy may take courses at any of the other three institutions, subject only to certain limitations.

In many of the graduate programs in the humanities and social sciences at Bryn Mawr there is particular faculty interest in theories of interpretation and also in issues related to gender. As a result students are often encouraged to pursue courses outside their departments in complementary areas of theoretical concern.

## **The Division of Special Studies**

Students in the Division of Special Studies who enroll in graduate courses and who are considering applying for admission as a regular student in the Graduate School of Arts and Sciences with the intention to work for a graduate degree should note carefully the following:

1. Credit toward a graduate degree for courses taken as a special student is not automatically granted by the Graduate School. Once admitted to the Graduate School, students may petition the Graduate Council for credit up to a maximum of two units toward the Master's degree. Students may petition the Graduate Council for a third unit of credit after they have been approved for Ph.D. candidacy. Graduate course tuition must have been paid for these units.

2. Upper-level undergraduate courses (numbered 300 or above) may be accepted for graduate credit provided that additional work is assigned at the time of course registration and further provided that graduate course tuition is paid. Under no circumstances will graduate credit be granted retroactively for undergraduate courses not designated, in advance, as graduate courses.

3. The fifty percent tuition discount for alumnae/i does *not* apply to courses that are submitted for graduate credit.

## **Grading System**

Students in the Graduate School of Arts and Sciences at Bryn Mawr do not receive letter grades. At the completion of a seminar or unit of graduate work, the student's work is graded

satisfactory (S) or unsatisfactory (U), and the instructor writes a narrative evaluation of the student's performance and ability to proceed with graduate work. These are kept on file in the Graduate School and copies are mailed each semester to the student.

In the case of work still incomplete at the conclusion of a unit, the instructor shall set a deadline for the completion of that work which can be no later than thirty days after the beginning of the next fall semester. Work still incomplete after the deadline will be graded permanently incomplete.

## Summer Work

Bryn Mawr has no regular graduate summer session on campus. The science departments, however, usually expect graduate students to continue with research projects over the summer and provide a modest stipend.

## Summer Institutes Abroad

Bryn Mawr College offers summer programs of intensive training in language and significant aspects of culture in three locations abroad. Certain courses may carry graduate credit.

### *Institut d'Etudes Françaises d'Avignon*

For information write to Professor Michel Guggenheim, Department of French, Bryn Mawr College.

### *Centro de Estudios Hispánicos (Madrid)*

For information write to Professor Eleanor Paucker, Department of Spanish, Bryn Mawr College.

### *Pushkin Institute of the Russian Language (Moscow)*

For information write to Professor Dan E. Davidson, Department of Russian, Bryn Mawr College.



# Degree Requirements

The Graduate School of Arts and Sciences offers programs leading to the degrees of Master of Arts and Doctor of Philosophy.

## The Degree of Master of Arts

The general requirements for the M.A. degree are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the department concerned.

2. A knowledge of one modern foreign language and/or such additional foreign languages or special techniques as the individual departments may require. Students whose native language is not English, except for those majoring in the language and literature of their native tongue, are not required to present an additional language.

3. The completion of a satisfactory program of work endorsed by the department and accepted by the Council of the Graduate School of Arts and Sciences. Application for such endorsement must be submitted on a M.A. candidacy form to the dean of the Graduate School of Arts and Sciences not later than one week after the beginning of the second semester of the academic year in which the prospective candidate wishes to take the degree.

4. The program of study must include six units of work, of which at least two units must involve participation in a year-long seminar or two semester seminars. The additional units may consist of additional seminar work, or no more than two units of independent supervised work and no more than two units of approved upper-level undergraduate coursework. If undergraduate courses are included among the six units, they must be supplemented by additional work in order to be counted for graduate credit. Candidates whose major department conducts a journal club or colloquium are expected to include it in their program.

5. The preparation of a paper in a special field normally related to one of the seminars or units of graduate work in the candidate's program. Candidates currently at Bryn Mawr College shall submit this paper by the date set by the department. Candidates not currently on campus must submit the paper at least thirty days before commencement in the academic year of their candidacy.

6. Each candidate, after all other requirements have been completed, must pass a final examination.

7. Work for the degree may be spread over several years which need not be in succession but must be included in a five-year period (sixty months).

## **The Degree of Doctor of Philosophy**

The course of study is designed to prepare students for professional careers as scholars and teachers. Candidates should have ability of high order, intellectual curiosity, critical judgment, independence, a broad general education, fundamental training in the major and allied fields, and the determination needed to complete an exacting program.

The general requirements, to which should be added those of the various departments, are as follows:

1. Undergraduate preparation in major and allied fields which is satisfactory to the departments concerned.

2. The completion of at least twelve academic units within the Graduate School of Arts and Sciences of Bryn Mawr College or under its sponsorship through an approved Reciprocal Plan (maximum of four units). Two units of supervised work on the dissertation are required, which may be part of (but often are taken in addition to) the twelve units of the residence requirement.

3. The recommendation of the student as a candidate for the Ph.D. by the director of the dissertation and the major department and the acceptance of the recommendation by the Council of the Graduate School of Arts and Sciences. Application for candidacy, on a form to be obtained at the Office of the Dean of the Graduate School of Arts and Sciences, may be made at any time after the completion of six units of graduate work at Bryn Mawr. Candidacy must be approved before a student may take the preliminary examinations for the degree.

4. Knowledge of the foreign languages, computer languages, and special techniques (such as statistics) required by the individual departments. In certain circumstances, students whose native language is not English may offer English for one of the languages. These requirements must be fulfilled before the student takes the preliminary examinations.

5. Satisfactory preliminary examinations in the fields established for the candidate. These examinations are intended to test the candidate's knowledge of the principles of the subject, exemplified by the command of several fields or areas, ability to apply knowledge to new problems, and power of organization.

6. The preparation of a dissertation worthy of publication, which presents the results of independent investigation in the field of the major subject and contains original material, results, or interpretations.

7. A satisfactory final oral examination devoted to the dissertation and the special field in which it has been written.

8. The publication of the dissertation in whole or part. Micro-filming is accepted as a method of publication.

A special pamphlet describing regulations for the Ph.D. degree is issued to students applying for candidacy. Candidates for the Ph.D. should particularly note the requirement for continuous registration once a student has been accepted for candidacy and should also note that if any part of the preliminary examinations has been taken more than five years (sixty months) before the final examination, the final examination must be both written and oral and must cover one of the general fields or areas offered for the preliminary examinations.



# Graduate Program in Arts and Sciences

## Graduate Faculty

Faculty on leave during all or part of the 1988-89 academic year are listed in Appendix A.

## Graduate Seminars and Courses

The seminars and courses listed in this catalogue represent only those typically or recently offered by the department. There is no assurance that a given seminar will be offered in any one year unless the department so indicates. Questions concerning the availability of specific seminars or courses in a particular year should be addressed to the individual department chairmen.

Special graduate requirements are listed under each department. For the general degree requirements for the M.A. and Ph.D., see pages 20-22. Graduate students are responsible for keeping themselves informed concerning both general and departmental requirements and should consult regularly with their departmental adviser.

## Anthropology

*Professors:* Jane C. Goodale, Ph.D.  
Richard H. Jordan, Ph.D., *Chairman*  
Philip L. Kilbride, Ph.D.  
Judith Shapiro, Ph.D., *Academic Deputy to the  
President of the College*

*Associate Professor:* Richard S. Davis, Ph.D.

*Professor of Linguistics in Anthropology and German:*  
Nancy C. Dorian, Ph.D.

*Assistant Professor:* Jean DeBernardi, Ph.D.

*Prerequisites:* A good undergraduate preparation in anthropology or a closely related discipline is desirable. Scores of the Graduate Record Examination Aptitude Test are required for admission. Students whose undergraduate training is not entirely adequate will be required to take such undergraduate courses as may seem necessary.

*Language Requirements and Special Skills Options:* Candidates for the M.A. must have proficiency in one language (French, German, Russian, Spanish) or in statistics or in computer science. Candidates for the Ph.D. must offer one of the following two options: two modern languages (French, German, Russian, Spanish) or one modern language (French, German, Russian, Spanish) and statistics or computer science. Language skills will be tested by examinations administered by the department. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr. Competence in statistics and computer science will be acknowledged when the student satisfactorily passes an approved graduate course in statistics or computer science. The statistics requirement may also be fulfilled by passing an examination administered by the department.

*Program and Examination for the M.A.* For students with an excellent undergraduate preparation, the program may consist of a minimum of six units of work in seminars or advanced undergraduate courses arranged for graduate credit. At the M.A. level, students are expected to achieve comprehensive training in the field of anthropology holistically defined to include cultural anthropology, archaeology, and anthropological linguistics. (Work in physical anthropology can be done at the University of Pennsylvania.) The program usually takes two years. The M.A. paper may be based on an essay offered in a seminar. The final examination consists of one four-hour written examination, but the Ph.D. preliminary examinations may be substituted for the M.A. examination. All graduate students are expected to take the M.A. before proceeding to the Ph.D. Those who enter Bryn Mawr College with an M.A. in anthropology may petition the department to proceed directly to the Ph.D. program.

*Program and Examinations for the Ph.D.* It is the department's goal to produce graduates of its Ph.D. program who are both broadly trained in the general field of anthropology and special-

ists in particular areas of research. In addition to the holistic training outlined above, the department offers advanced research training in the following topical and geographical specializations: Arctic and Old World prehistory, kinship and social organization, cultural and symbolic analysis, anthropology of gender, social change and modernization, psychological anthropology, missionization, ethnography of Oceania, ethnography of sub-Saharan Africa, ethnography of East and Southeast Asia. Students are encouraged to supplement our course offerings with those at Haverford College and the University of Pennsylvania.

The preliminary examinations for candidates for the Ph.D. (usually taken near the end of the third year of graduate work) will consist of three four-hour written examinations and an oral examination of one hour. Of the three written examinations, one is taken in a topical field of specialization, one in a geographical area of specialization, and one in anthropological theory. Students must also have a research proposal approved by the supervising committee.

Since the dissertation is usually based upon field work, it is difficult for a student to obtain the degree in fewer than five years.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

Course offerings each semester include both graduate seminars and advanced undergraduate courses that can be taken for graduate credit. Rarely is the same seminar offered in consecutive years, in order to allow the greatest possible choice and variety to each student over a two-to-three-year period. For advanced students, units of supervised readings are sometimes substituted for seminars. Topics listed below indicate the areas in which seminars will be offered according to the needs of students.

Mr. Davis

*Archaeological Theory and Method*  
*Environmental Archaeology*  
*Cultural Ecology*  
*Topics in Old World Archaeology*  
*Asian Paleolithic Archaeology*  
*Hunters and Gatherers*

Miss DeBernardi  
*Culture Theory*  
*Topics in East and Southeast Asian Ethnography*  
*Anthropology of Religion*  
*Linguistic Anthropology*

Miss Dorian  
*Sociolinguistics*

Miss Goodale  
*Social Organization*  
*Ethnographic Methods*  
*Ethnography of Oceania*  
*Symbolic Anthropology*  
*Hunters and Gatherers*

Mr. Jordan  
*Archaeological Method of Analysis*  
*Environmental Archaeology*  
*Cultural Ecology*  
*Topics in North American Archaeology*  
*Arctic and Subarctic Archaeology*

Mr. Kilbride  
*Ethnographic Methods*  
*Topics in African Ethnography*  
*Psychological Anthropology*  
*Cultural Dynamics and Modernization*  
*Anthropological Approaches to the Study of the State*

Miss Shapiro  
*Topics in South American Ethnography*  
*Anthropology of Gender*

#### SELECTED UNDERGRADUATE COURSES

- |     |  |
|-----|--|
| 303 | <i>Cultural Theory:</i> Miss DeBernardi                              |
| 313 | <i>Linguistic Anthropology:</i> Miss DeBernardi                      |
| 330 | <i>Comparative Hunters and Gatherers:</i> Miss Goodale,<br>Mr. Davis |
| 340 | <i>Psychological Anthropology:</i> Mr. Kilbride                      |
| 350 | <i>The Anthropology of Gender:</i> Miss Shapiro, Miss<br>Goodale     |
| 351 | <i>Symbolic Anthropology:</i> Miss Goodale, Miss<br>DeBernardi       |

- 357     *Political Anthropology*: Mr. MacGaffey (at Haverford)  
 358     *Economic Anthropology*: Mr. MacGaffey (at Haverford)  
 360     *Human Evolution*: Mr. Jordan, Mr. Davis

In addition, courses at the University of Pennsylvania are available under the terms of the Reciprocal Plan (see page 17).

## Biochemistry

*Professors of Biology*: Robert L. Conner, Ph.D.  
                                  Paul Grobstein, Ph.D.,  
                                      *Chairman of Biology*  
                                  Anthony R. Kaney, Ph.D.

*Professor of Chemistry*: Frank B. Mallory, Ph.D.,  
                                      *Chairman of Chemistry*

*Associate Professor of Biology*: David J. Prescott, Ph.D.

*Associate Professors of Chemistry*: Charles S. Swindell, Ph.D.,  
                                      *Acting Chairman of*  
                                      *Chemistry, 1988-1989*  
                                  Kenneth G. Strothkamp,  
                                      Ph.D., *Chairman, Com-*  
                                      *mittee on Biochemistry*

*Assistant Professor of Biology*: Karen F. Greif, Ph.D.

This interdisciplinary program offers work within the Departments of Biology and Chemistry and leads to the M.A. or Ph.D. degree. The program is administered by the Committee on Biochemistry, which consists of members of both departments. Students may enroll through either the Department of Biology or the Department of Chemistry and admission to the program is by consent of the Committee on Biochemistry.

*Prerequisites.* Undergraduate degree with a major or its equivalent in biology or chemistry.

*Major and Allied Subjects.* Students will receive their advanced degrees in either biology or chemistry with a major in biochemistry. The allied subjects will usually be selected from fields in



biology or chemistry other than biochemistry, or may be selected from biophysics, physics, or mathematics. Other combinations may be accepted with the approval of the Committee and the Council of the Graduate School of Arts and Sciences.

*Language Requirements.* See the requirements set by each department.

*Program and Examination for the M.A.* Students who are candidates for the Master's degree will usually offer two seminars or courses in either biology or chemistry, two seminars or courses in biochemistry, and additional work consisting of an experimental investigation. The experimental work will be carried out under the direction of a member of the Committee on Biochemistry and must be presented in the form of a written paper. The final exam consists of a three-hour written and one-hour oral examination administered by members of the Committee on Biochemistry who have been involved in the student's training. The written exam will be based on course work done at Bryn Mawr. The oral exam will cover the M.A. research and any questions raised by the results of the written exam.

*Program and Examinations for the Ph.D.* All students must take the core curriculum in biochemistry, which includes Biology (or Chemistry) 341 and 342 or their equivalent and the graduate courses Chemistry (or Biology) 541 and 542. Students should note that a one-year course in physical chemistry is pre- or co-requisite for admission to graduate courses in biochemistry. A course in cell biology or cell physiology and a course in genetics are also required. Any deficiencies in a student's background can usually be remedied in the first year. Additional seminars and graduate courses, depending on individual interests, may be taken in either department or at consortium institutions in order to acquire a broad background for research and teaching. Students will devote a large portion of their time to their research problem under the supervision of a member of the Committee on Biochemistry. Course work and the research program will be guided by the committee.

The preliminary examination for the Ph.D. consists of two written examinations, each of four hours duration, and two oral examinations of at least one hour. One of the written examinations will deal with general aspects of biochemistry and the second with the specific area of the candidate's research. Upon completion of the two written exams, the candidate will meet with his or her Ph.D. committee for the first oral exam. The

purpose of this exam is to clarify and augment the candidate's responses on the written exams. The final part of the preliminary examination will consist of an oral defense of an original biochemical research proposal developed by the candidate and submitted to the committee. This proposal may not be in the same area of research as the candidate's Ph.D. thesis work.

The final examination is an oral defense of the dissertation.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

Mr. Prescott

*Advanced Biochemistry* (Semester I)

A detailed examination of the structure and function of selected proteins. Physical and chemical means of determining the structure of macromolecules will be emphasized. Prerequisite: Biochemistry 341, 342, or equivalent. Prerequisite or co-requisite: Physical Chemistry 221, 222, or equivalent.

Mr. Strothkamp

*Advanced Biochemistry* (Semester II)

The kinetics and mechanisms of several enzyme systems will be examined in detail. Metalloenzymes will be emphasized. Prerequisite: Biochemistry 341, 342, or equivalent. Prerequisite or co-requisite: Physical Chemistry 221, 222, or equivalent.

Also see listings under the Departments of Biology and Chemistry.

## SELECTED UNDERGRADUATE COURSES

See listings under the Departments of Biology and Chemistry.

# Biology

*Professors:* Robert L. Conner, Ph.D.  
Paul Grobstein, Ph.D., *Chairman*  
Margaret Hollyday, Ph.D.  
Anthony R. Kaney, Ph.D.

*Associate Professor:* David J. Prescott, Ph.D.

*Assistant Professor:* Karen F. Greif, Ph.D.

*Lecturers:* Stephen L. Gardiner, Ph.D.  
David E. Chyla, Ph.D.

*Associate Professor of Chemistry:* Kenneth Strothkamp, Ph.D.

The Department of Biology has a long-standing tradition of successful, broad-based graduate education in the biological sciences. Since 1966, fifty-two students have been awarded the doctorate and thirty-five the master's degree. Currently, research opportunities are available in a number of areas including molecular biology, enzyme structure and function, lipid and receptor biochemistry, membrane metabolism, developmental genetics, comparative zoology, developmental neurobiology, and neurobiology and behavior. Overlapping research programs provide the basis for broader training in cellular and subcellular regulation, developmental biology, and neurobiology. More generally, the departmental program is directed at preparing students to approach problems of integrative organization in biological systems at levels ranging from the molecular to the organismal.

*Research Requirement.* Active engagement in research and the development of advanced research skills are required for a graduate degree in biology. This research requirement may be met in various ways, including registration for units of independent research, registration for supervised research on the dissertation topic, participation in a research project as a formally designated research assistant, or a combination of these.

*Prerequisites.* An undergraduate major in a natural science, including courses in calculus, physics, and organic chemistry. One year of advanced biology with laboratory is required. Students without these prerequisites may be admitted but will be



required to make up deficiencies in their preparation. All applicants should submit scores from the Graduate Record Examination Aptitude Test and an Advanced Test in a natural science.

*Major and Allied Subjects.* Candidates for the M.A. and Ph.D. degrees may specialize but must take work also from areas not chosen for specialization. Candidates may specialize in biochemistry through the Biochemistry Program (see page 27). A comparable interdepartmental program in neurobiology and behavior is being considered for establishment in the near future. Allied subjects may be selected from fields in chemistry, physics, and psychology, and in special cases from other related fields, with the approval of the Department of Biology and the Council of the Graduate School of Arts and Sciences.

*Language Requirements and Special Skills Options.* Candidates for the M.A. degree must satisfy the requirement in one foreign language, statistics, or computer science. Candidates for the Ph.D. degree must satisfy the requirement in two foreign languages, French and German (or some other language by special permission of the department and the Council of the Graduate School of Arts and Sciences), or one foreign language and statistics or computer science. The statistics or computer science requirement may be satisfied by a course at Bryn Mawr or by examination. Alternatively, students may demonstrate competence in computer science by submitting to the department an acceptable original program with a written description of the mathematical basis of the program. Language skills will be tested by examinations administered by the department.

*Program and Examination for the M.A.* One full year, or its equivalent, of course work in seminars and advanced undergraduate courses which qualify for graduate credit and a written report on a piece of experimental work carried out under the direction of a member of the department. Students may substitute two semester courses of supervised research for formal course work. The final examination consists of a three-hour written examination covering the course work and a one-hour oral examination concentrating on evaluation of the experimental work and its relation to biology.

*Program and Examinations for the Ph.D.* The preliminary examination for the Ph.D. consists of three written examina-

tions, each of four hours' duration, and an oral examination of at least one hour. These examinations will cover the areas included in the course work in the specialty and allied fields. After the subject of the dissertation has been decided, the student will meet with the Biology Department to outline and discuss the proposed plan of research. The final examination is oral, covering the subject of the dissertation.

*General Degree Requirements for the M.A. and Ph.D.* In addition to the general requirements of the Graduate School of Arts and Sciences (see pages 20-22), all graduate students in the Department of Biology are expected to gain experience in teaching, usually in the capacity of a teaching assistant.

*Cooperation with the Medical College of Pennsylvania.* Students formally enrolled in the graduate program in biology at Bryn Mawr College are permitted to take one graduate course per semester for credit and without payment of additional tuition or fees.

## GRADUATE COURSES AND SEMINARS

A selection of graduate courses and seminars is offered each semester. Typically, each subject on the list below is treated at least once in any given two-year period, more frequently in cases of particular student interest. Students may also attend graduate courses under Reciprocal Plans with the University of Pennsylvania (see page 17) and the Medical College of Pennsylvania.

### *Biochemistry*

- Advanced Biochemistry
- Protein Structure and Chemistry
- Neurochemistry

### *Cellular Physiology*

- Membrane Structure and Function
- Regulation of Lipid Metabolism
- Molecular Endocrinology

### *Genetics*

- Genetic Analysis of Behavior
- Developmental Molecular Genetics

### *Neurobiology*

Developmental Neurobiology  
Neural Substrates of Behavior  
Simple Systems Neurophysiology  
Comparative Neuroanatomy

### *Organismal Biology*

Developmental Biology  
Comparative Physiology  
Functional Morphology  
Invertebrate Biology

## GRADUATE JOINT COURSE

Faculty of the Department of Biology and The Medical College of Pennsylvania. *Molecular Aspects of Cell Structure and Function* (Semesters I and II): A general introduction to current concepts in molecular and cellular biology. The course is divided into four sections:

- I. Cellular Biology and Biochemistry
- II. Viruses, Bacteria, and Eukaryotic Cells
- III. Genetics and Molecular Biology
- IV. Molecular Aspects of the Disease State

## SELECTED UNDERGRADUATE COURSES

Two of the following advanced undergraduate courses, with supplemental work, may be taken for graduate credit.

- |          |  |
|----------|--|
| 201      | <i>Genetics</i> : Mr. Kaney  |
| 202      | <i>Neurobiology and Behavior</i> : Mr. Grobstein                           |
| 304      | <i>Nervous System Structure and Function</i> : Ms. Hollyday, Mr. Grobstein |
| 340      | <i>Cell Biology</i> : Ms. Greif  |
| 341, 342 | <i>Biochemistry</i> : Mr. Conner, Mr. Prescott, Mr. Strothkamp             |
| 350, 351 | <i>Cellular Physiology</i> : Mr. Conner                                    |
| 336      | <i>Evolution</i> : Mr. Gardiner  |
| 371      | <i>Developmental Biology</i> : Ms. Hollyday                                |

# Chemistry

*Professors:* Frank B. Mallory, Ph.D., *Chairman*  
George L. Zimmerman, Ph.D.

*Associate Professors:* Kenneth G. Strothkamp, Ph.D.  
Charles S. Swindell, Ph.D., *Acting*  
*Chairman, 1988-89*  
Joseph Varimbi, Ph.D., *Acting Director*  
*of the Division of Special Studies*

*Assistant Professors:* Sharon J. Nieter Burgmayer, Ph.D.  
Michelle M. Francl, Ph.D.

*Lecturers:* Krynn DeArman Lukacs, Ph.D.  
Maryellen Nerz-Stormes, Ph.D.

*Associate Professor of Biology:* David J. Prescott, Ph.D.

*Fields of Study and Research.* The primary aim of the graduate program in chemistry is to prepare men and women for professional careers in academic or industrial research or in teaching by providing them with a sound and broad background in modern chemistry. Through a program of advanced courses, students are expected to develop a command of their chosen field of specialization in chemistry and also to acquire a sufficiently broad background in one or more other fields of chemistry so that they will be prepared for the variety of assignments in chemical research or teaching that they may encounter later during their careers. The fields of specialization represented in the department include organic chemistry, physical chemistry, inorganic chemistry, and biochemistry (see the description of the interdepartmental program in biochemistry on page 27). The major part of each student's graduate training is acquired through the experience of carrying out dissertation research under the supervision of a member of the faculty. Currently there are active research programs in the department in the following areas: organic synthesis of natural products, development of new reactions for organic synthesis, mechanistic and synthetic organic photochemistry, nmr studies, *ab initio* molecular orbital calculations applied to enzymatic reaction mechanisms, computational chemistry, gas-phase molecular spectroscopy and photochemistry, transition metal complexes involving heterocyclic ligands, bioinorganic chemistry, and structure and function of copper proteins.

*Research Requirement.* Active engagement in research and the development of advanced research skills are required for a graduate degree in chemistry. This research requirement may be met in various ways, including registration for units of independent research, registration for a supervised research on the dissertation topic, participation in a research project as a formally designated research assistant, or a combination of these.

*Prerequisites.* Undergraduate courses in general chemistry, organic chemistry, physical chemistry, inorganic or analytical chemistry, calculus, and general physics. Applicants should submit scores on the Graduate Record Examination, including all of the Aptitude Tests and the Advanced Test in Chemistry. Under special circumstances, applicants lacking one or more of these prerequisites may be considered for admission in consultation with the department.

*Special Skills Requirements.* Candidates for the M.A. degree must demonstrate skill either in computing or in a foreign language. Candidates for the Ph.D. degree must demonstrate skill both in computing and in a foreign language. To demonstrate skill in computing, a student must pass an examination set by the department. To demonstrate skill in a foreign language, a student must pass an examination set by the department and under the supervision of the Graduate School of Arts and Sciences. The examination involves the translation into English of chemical articles written in one of the following languages: French, German, or Russian; alternatively, entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* Candidates for the M.A. degree usually complete two units of 500-level coursework in their field of specialization, two other units of 300-level or 500-level coursework in chemistry, and at least two units of supervised research in chemistry under the supervision of a faculty member. The final examination is a four-hour written examination covering material in the candidate's special field.

*Program and Examinations for the Ph.D.* Although flexibility is possible, candidates for the Ph.D. degree usually complete five or six units of advanced coursework in their field of specialization and at least two units of advanced coursework in another



field of chemistry. Dissertation research normally is begun in the summer following the student's first academic year of graduate work and occupies the major portion of the student's time for the subsequent three (or four) years. Usually, the preliminary examinations are taken in the student's third year of graduate study; they consist of two four-hour written examinations and two one-hour oral examinations. The two written examinations will cover the candidate's field of specialization; the first will deal with general aspects of that field and the second with aspects of the particular areas of that field in which the candidate's research is being carried out. This second examination will include questions designed to test the candidate's understanding of material from the recent chemical literature. One of the oral examinations will be for the purpose of clarifying and augmenting the candidate's responses on the two written examinations. The three examinations described so far must be completed within a period of five weeks. The other oral examination will involve the defense of two original chemical research proposals previously developed and submitted by the candidate. No more than one of these proposals may deal with work in the candidate's area of research within the field of specialization. All four of the preliminary examinations must be completed within a period of one year. After the candidate's Ph.D. dissertation has been submitted, there will be a one-hour oral final examination devoted to the dissertation.

*General Degree Requirements for the M.A. and Ph.D.* See pages 20-22.

*Colloquium:* All of the faculty and graduate students of the department meet regularly on Friday afternoons to hear and discuss presentations of current research, usually by chemists from other institutions.

## GRADUATE COURSES

The department offers the following one-semester courses, most of which are given on an alternate-year basis:

### *Organic Chemistry:*

Synthetic Organic Chemistry: Modern Methods: Mr.  
Swindell

Synthetic Organic Chemistry: Natural Products: Mr.  
Swindell

Physical Organic Chemistry: Molecular Photochemistry:  
Mr. Mallory

Physical Organic Chemistry: Selected Topics: Mr. Mallory

*Physical Chemistry:*

Statistical Thermodynamics: Mr. Zimmerman

Topics in Quantum Chemistry: Ms. Francel

*Inorganic Chemistry:*

Topics in Inorganic Chemistry: Ms. Burgmayer

*Biochemistry:*

Spectroscopy of Macromolecules: Mr. Strothkamp

Structure and Chemistry of Proteins: Mr. Prescott

Metal Ions in Biological Systems: Mr. Strothkamp

### SELECTED UNDERGRADUATE COURSES

- 311    *Advanced Organic Chemistry I:* Mr. Swindell  
312    *Advanced Organic Chemistry II:* Mr. Mallory  
321    *Advanced Physical Chemistry I:* Ms. Francel  
322    *Advanced Physical Chemistry II:* Mr. Zimmerman  
332    *Advanced Inorganic Chemistry:* Ms. Burgmayer  
341    *Macromolecular Structure and Function:* Mr.  
      Strothkamp, Mr. Prescott  
342    *Intermediary Metabolism:* Mr. Prescott, Mr.  
      Strothkamp

## Classical and Near Eastern Archaeology

*Professors:* Richard S. Ellis, Ph.D.  
Gloria F. Pinney, Ph.D., *Chairman*  
Brunilde S. Ridgway, Ph.D.

*Associate Professor:* James C. Wright, Ph.D.

*Assistant Professor:* Bonnie Magness-Gardiner, Ph.D.

*Professor of Classical and Near Eastern Archaeology and of  
History of Art:* Phyllis Pray Bober, Ph.D.

*Prerequisites.* An undergraduate major in archaeology or at least two courses in archaeology or ancient art combined with a major in history of art, anthropology, Greek, Latin, or ancient history. It is expected that students of classical archaeology will have a basic knowledge of Greek, Latin, and ancient history, and a reading knowledge of German and French (or Italian). For students of Near Eastern archaeology the prerequisites are ancient history and a reading knowledge of German and French (or Italian); some preliminary study of an ancient Near Eastern language is desirable. Each application will be judged individually on its aims and soundness of preparation. All applicants must submit scores of the Aptitude Test of the Graduate Record Examinations.

*Fields of Study and Allied Subjects.* There are two fields of concentration: (1) The art and archaeology of the Greek and Roman world and its Mediterranean predecessor; (2) the art and archaeology of the ancient Near East. These fields may be combined in a program of major and allied subjects. Allied subjects are ancient languages (Greek, Linear B, Latin, Sumerian, Akkadian, Ugaritic, Hebrew, Hittite, Egyptian), ancient history, history of art, anthropology, or a science related to the program of the student. See also Classical Studies.

*Language Requirements.* For the M.A. and the Ph.D., a good reading knowledge of German and French. For the Ph.D., a reading knowledge of one ancient language. Modern language skills will be tested by examinations administered by the department.

*Program and Examination for the M.A.* Six units of work in the Department of Archaeology or in Archaeology and an allied field; a research paper prepared under the supervision of a departmental adviser; three hours of written examination concerning the field in which the research paper was undertaken; one hour of oral examination to discuss the results. This M.A. is prerequisite for the Ph.D. program and will normally take two years to complete.

*Program and Examinations for the Ph.D.* After completion of the M.A. program, students continue to take seminars and supervised work in preparation for the preliminary examinations and the Ph.D. dissertation. A program of study is designed for each individual student in consultation with the department.



Four special fields of study (one of which may be an allied field) are prepared for the preliminary examinations. The examinations consist of four four-hour papers and an oral examination.

All graduate students are encouraged to spend their third or fourth year of graduate study abroad. Students in classical archaeology are advised to spend a year at the American School of Classical Studies in Athens. Students of Near Eastern archaeology will be advised to attend a center of archaeological research in their area of concentration. Museums in Europe and the Near East should be visited in the course of the year(s) spent abroad. Participation in excavations under the auspices of Bryn Mawr College or other schools is arranged when possible.

Depending upon individual study programs, the preliminary examinations are normally taken at the end of the third or in the course of the fourth year of graduate study.

*Fellowships for Excellence in the Classics.* In addition to the regular fellowships and scholarships, three special Fellowships for Excellence in the Classics are awarded each year on the recommendation of the Classical Committee to new students in the Departments of Classical and Near Eastern Archaeology, Greek, and Latin.

*Classical Languages and Classical Studies.* For M.A. and Ph.D. degrees in both Greek and Latin and in combinations of either or both languages with Classical Archaeology, see Classical Languages and Classical Studies.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

*Field Projects:* The department has three projects of excavation and survey. All of them have finished their field work and are now in the phase of analysis and publication of the results. These are the excavations at Karatas/Semayük and at Gritille in Turkey and the regional archaeological study of the Nemea Valley Archaeological Project in Greece. Further field projects in Greece or the Near East are foreseen for the future. There will be opportunities for Bryn Mawr graduate students and advanced undergraduates to participate in these projects. In addition, students are often able to take part in excavations sponsored by other institutions. Archaeology applicants interested in excavation are strongly urged to get field experience as soon as possible and to consider attending training programs in the United States or abroad, as well as in the area of their special interest.

*Cooperation with the University of Pennsylvania.* Attention is drawn to the courses offered by the Departments of Classical Archaeology, Anthropology, History of Art, Oriental Studies, and Biblical Archaeology at the University of Pennsylvania. Under the Reciprocal Plan (see page 17), students may register for a unit of work each semester at the University or pursue research at the University Museum.

## SEMINARS AND GRADUATE COURSES

Seminar topics are determined for each semester in consultation with the graduate students.

Mrs. Bober

*Roman Portraiture*

*The Art of Late Antiquity*

*The Survival of Antiquity in the Renaissance*

*Roman Sarcophagi: Problems in Style and Iconography*

Mr. Ellis

*Archaeology of Syria; Phoenicia in the Iron Age*

*The Bronze Age in the Levant*

*The Archaeology of Ur, Assur, and Babylon*

*The Art of the Assyrian Palaces*

*Syro-Hittite Sites and their Art*

*Mesopotamia in the Third Millennium B.C.*

*Problems in the Archaeology of Mesopotamia*

*Problems in the Archaeology of Syria-Palestine*

Mrs. Magness-Gardiner

*Aspects of Second Millennium North Syrian Cylinder Seals*

*Theory and Method of Historical Archaeology in the Ancient Near East*

Mrs. Pinney

*Problems in Greek Iconography*

*Greece in the Later Iron Age*

*Monumental Painting*

*Problems in Greek Vase Painting*

*Roman Sculpture*

Mrs. Ridgway

*Hellenistic Sculpture*

*Greek Sculpture*

*Roman Copies of Greek Sculpture*

*Julio-Claudian Sculpture*

*Architectural Sculpture of Magna Graecia*

*The Architecture of the Athenian Akropolis*

Mr. Wright

*The Early Iron Age in the Aegean*

*Problems in the Study of Greek Cities*

*Problems in Greek Architecture*

*Problems in Aegean Prehistory (including Neolithic, Early  
Bronze Age, Minoan, or Mycenaean)*

*Problems in the Interpretation of Prehistoric Aegean Cul-  
tures*

### SELECTED UNDERGRADUATE COURSES

Incoming students with incomplete preparation in archaeology will be advised to take selected undergraduate courses (with additional work for graduate credit) during their first years in graduate school.

- |     |   |
|-----|---|
| 201 | <i>Mesopotamian Archaeology:</i> Mr. Ellis                                |
| 205 | <i>Greek Sculpture:</i> Mrs. Ridgway                                      |
| 209 | <i>Aegean Archaeology:</i> Mr. Wright                                     |
| 213 | <i>Egyptian Archaeology:</i> Mr. Ellis                                    |
| 216 | <i>Hittite Archaeology:</i> Mrs. Magness-Gardiner                         |
| 221 | <i>History of the Ancient Near East:</i> Mr. Ellis                        |
| 261 | <i>Roman Art:</i> Mrs. Pinney   |
| 301 | <i>Greek Vase-Painting:</i> Mrs. Pinney                                   |
| 302 | <i>Greek Architecture:</i> Mr. Wright                                     |
| 305 | <i>Etruscan Archaeology:</i> Mrs. Pinney                                  |
| 306 | <i>Monumental Painting:</i> Mrs. Pinney                                   |
| 307 | <i>Archaeology of Syria and Palestine:</i> Mrs. Magness-<br>Gardiner      |
| 309 | <i>The Origins of Civilization and the State:</i> Mr. Ellis,<br>Mr. Davis |

# Classical Languages

For faculty see Departments of Greek and Latin.

Students may enroll through either the Department of Greek or the Department of Latin, and admission to the program is by consent of the Classical Committee.

*Prerequisites.* An undergraduate major in Classics, with a good reading knowledge of both languages and representative reading in both literatures.

*Language Requirements.* French and German for both the M.A. and Ph.D. degrees.

*Program and Examination for the M.A.* Six units of graduate work divided equally between Greek and Latin; sight translation examinations in both Greek and Latin; an M.A. paper combining material from the two languages; a final examination consisting of a three-hour written examination on two of the fields covered by the student's seminars and an oral examination of one hour on the field of the paper.

*Program and Examinations for the Ph.D.* Ten units of graduate work equally divided between Greek and Latin and two units of supervised work on the dissertation. Rigorous sight translation examinations in both languages must be passed before the preliminary examinations, which consist of four written papers (two to be chosen from fields offered in Greek and two from those offered in Latin). The dissertation must combine, to some degree, material from both languages. The final examination is devoted to the dissertation and the field in which it has been written.

For seminars and courses see Departments of Greek and Latin.

# Classical Studies

For faculty see Departments of Classical and Near Eastern Archaeology, Greek, and Latin. Students may enroll through the Department of Classical and Near Eastern Archaeology, the Department of Greek, or the Department of Latin, and admission to the program is by consent of the Classical Committee.

Both M.A. and Ph.D. degrees are offered in the following fields:  
Classical Studies (Classical Archaeology, Greek, and Latin)  
Greek Studies (Greek Archaeology and Greek)  
Roman Studies (Roman Archaeology and Latin)

*Prerequisites.* An undergraduate major or minor in Classics with a good reading knowledge of one or both languages and/or ancient history.

*Language Requirements.* French and German for all degrees.

*Program and Examination for the M.A.* Sight translation examinations in Greek or Latin or both. Six units to be divided equally between the two or among the three departments. An M.A. paper combining material from two departments. An examination, both written and oral, on an appropriate combination of subjects from the two or three departments involved.

*Program and Examination for the Ph.D.* Ten units to be divided as equally as possible between the two or among the three departments. Sight translation examinations in Greek or Latin or both. The four preliminary examinations are divided equally between two departments or, in the case of three departments, one in each of two and two in the third or "major" department. Two units of supervised work on the dissertation, which combines material from two departments at least to some degree. A final oral examination in defense of the dissertation.

For seminars and courses see the Departments of Classical Archaeology, Greek, and Latin.



# English

*Professors:* Robert B. Burlin, Ph.D.  
Thomas H. Jackson, Ph.D.  
Joseph E. Kramer, Ph.D.

*Associate Professors:* Carol L. Bernstein, Ph.D.,  
*Chairman and Director of Graduate Studies*  
Sandra M. Berwind, Ph.D.  
Peter M. Briggs, Ph.D.  
Katrin Ristkok Burlin, Ph.D.  
Susan Dean, Ph.D.  
E. Jane Hedley, Ph.D.

*Assistant Professors:* Diane Elam, Ph.D.  
Xavier Nicholas, Ph.D.

*Prerequisites.* An undergraduate major in English or its equivalent. All applicants should submit scores in the Aptitude Test and the Advanced Test of the Graduate Record Examinations and a sample of recent critical writing. Personal interviews, while not required for admission, are encouraged.

*Language Requirements.* It is hoped that language skills will enrich the student's work in seminars and courses. For the M.A. degree, a knowledge of either French or German adequate to the reading of scholarly and literary texts is required. For the Ph.D., the student must either pass examinations in both French and German or demonstrate superior competence in one by satisfactorily completing one unit of graduate work in that language or its literature at Bryn Mawr College. (In special cases, with the approval of the appropriate language department and the Department of English, equivalent work at another university may be accepted.) It is recommended that students working toward the doctorate have formal training in Latin or Greek. The doctoral candidate should satisfy these requirements by the beginning of the second year of graduate study; they must be satisfied before the candidate will be admitted to the preliminary examinations.

With the approval of the Department of English, another modern language or Latin may be substituted for French or German when it can be shown to be pertinent to a projected dissertation.



Modern foreign language skills will be tested by examinations administered by the department. The student also has the option of offering scores of the GSFLT. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr College.

*Program and Examination for the M.A.* Six units of work in English or four in English and two in an allied field. A long paper written under the supervision of a faculty member is required. The final examination is written, four hours in length, on the general field of the M.A. paper.

*Program and Examinations for the Ph.D.* Work of the department is carried on primarily through small seminars, supplemented by selected advanced undergraduate courses in which the special needs of graduate students are met and, for advanced students, supervised units of independent study. Twelve units of graduate work are required, two of which may be in an allied field. Two additional units of supervised work on the dissertation (USD) are required. Candidates must spend at least one year in full-time graduate work. The program must include some training in Old or Middle English or in the history of the English language.

After being accepted for doctoral candidacy, the student will take preliminary examinations in five parts: four written (four hours each) and one oral (one or two hours). One written examination may be in an allied field. The choice of the four fields will be determined by the student in consultation with the graduate adviser and the departmental examiners, who will form the supervising committee. The candidate is expected to demonstrate a balanced knowledge of different periods.

Before proceeding with the dissertation the doctoral candidate will submit a prospectus to be discussed with the departmental members of the supervising committee. The final examination is devoted to the dissertation and the field in which it has been written.

*Teaching Preparation.* The department offers an apprenticeship program in teaching, which is available to students who have advanced beyond the M.A.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS

Seminars run for one semester. Over a two-year period, opportunities will be offered for seminar study in the following fields of English and American Literature.

*Medieval Literature:* Mr. Burlin  
*Literature of the Sixteenth Century:* Mrs. Hedley  
*Shakespeare and Renaissance Drama:* Mr. Kramer  
*Literature of the Seventeenth Century:* Mrs. Hedley  
*Restoration and Eighteenth-century Literature:* Mr. Briggs  
*Fiction:* Mrs. Burlin  
*Nineteenth-century English Literature:* Mrs. Bernstein  
*Twentieth-century Literature:* Mrs. Berwind, Mr. Jackson  
*American Literature:* Mrs. Dean, Mr. Nicholas

## ADVANCED UNDERGRADUATE COURSES OPEN TO GRADUATE STUDENTS

- 300 *Old English Literature:* Mr. Burlin  
303 *Middle English Literature:* Mr. Burlin  
307 *The History of The English Language:* Mr. Burlin  
315 *Sixteenth-century Chivalric Romance:* Mrs. Hedley  
316 *Spenser:* Mrs. Hedley  
323 *Forms of Renaissance Tragedy:* Mr. Kramer  
325 *Shakespearean Topics:* Mr. Kramer  
326 *Theater of Ben Johnson:* Mr. Kramer  
333 *The Metaphysical Poets: Donne to Marvell:* Mrs. Hedley  
340 *Samuel Johnson and His Circle:* Mr. Briggs  
342 *Literature in Transition 1740-1800:* Mr. Briggs  
350 *The Romance of the Self:* Mrs. Bernstein, Ms. Wright (Haverford)  
352 *Romanticism and Interpretation:* Mrs. Bernstein  
357 *Readings in Thomas Hardy:* Mrs. Dean  
358 *"Women of Talents":* Mrs. Burlin  
363 *Walt Whitman and American Poetry:* Mrs. Dean  
371 *The Development of Modern Poetry:* Mr. Jackson  
375 *W.B. Yeats and Wallace Stevens:* Mrs. Berwind  
376 *Joyce and Lawrence:* Mr. Jackson  
383 *The Novel and Society:* Mrs. Bernstein  
384 *Theories of Fiction:* Mrs. Bernstein  
385 *Problems in Satire:* Mr. Briggs  
388 *The Development of Modern Poetry:* Mr. Jackson  
393 *Interpretive Strategies:* Mrs. Bernstein

# French

*Professors:* Michel Guggenheim, Ph.D.  
Catherine Lafarge, Ph.D., *Dean of the Graduate  
School of Arts and Sciences*  
Mario Maurin, Ph.D.

*Associate Professor:* Grace Morgan Armstrong, Ph.D.,  
*Chairman*

*Assistant Professor:* Janet Doner, Ph.D.

*Prerequisites.* An undergraduate major in French, based on study in school and at least three years of college French, including advanced work in literature, with evidence of ability to present reports and carry on discussion in French is required. Training in Latin corresponding to at least two years' study in school is advisable.

Applicants should submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examination taken within two years of the date on which they wish to begin graduate studies at Bryn Mawr. Candidates are required to support their application by at least one essay written in French for an advanced undergraduate course or graduate seminar previously taken, as well as by an essay written in English. They are strongly urged to arrange for a personal interview with a member of the department.

*Major and Allied Subjects.* Students specialize in French literature from the Middle Ages to the present. Successful completion of a course in Old French philology and medieval French literature is required of Ph.D. candidates. In special cases and with the consent of the department, one of the following may be accepted as an allied subject: any literature, ancient or modern; comparative philology; European history; philosophy; history of art.

*Language Requirements.* For the M.A. degree, one Romance language other than French, or German, or evidence of extensive training in medieval or advanced Latin. For the Ph.D. degree, *either* a reading knowledge of two modern languages (including one Romance language other than French) *or* superior competence in one. Students may satisfy the latter requirement by completing satisfactorily at least two units of graduate work at Bryn Mawr in a Romance literature other than French or in German literature. Language requirements must be fulfilled

before the doctoral candidate takes the preliminary examinations.

Language skills will be tested by examinations administered by the department. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* Candidates will offer four units of graduate work in French and two units in either French or an allied field. An M.A. paper on a topic related to the work in one of the seminars is required. The final examination consists of a three-hour written examination and a one-hour oral examination, both in French.

*Admission to Candidacy for the Ph.D.* After completing six full units of graduate work at Bryn Mawr, students are required to pass a qualifying examination before admission to doctoral candidacy. The paper and final examination required for the completion of the Bryn Mawr M.A. program may be substituted for the qualifying examination.

*Program and Examinations for the Ph.D.* Candidates will offer twelve units of graduate work, one of which may be in an allied field. Suitable fields should be discussed with the department concerned and with the Department of French.

Students are encouraged to study and do research abroad whenever appropriate and feasible. Opportunities for summer study are provided by the graduate courses given at the Bryn Mawr *Institut d'Etudes Françaises d'Avignon*.

The preliminary examinations consist of four exams written in French and an oral examination. The final examination is oral and is devoted to the dissertation and the field in which it has been written.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

An introductory course in Old French philology and medieval French literature is offered on a regular basis. Graduate seminars in selected fields of French literature are given each year, so arranged that the same one will not be given in successive years. The seminars, conducted in French, are selected from the following:

Miss Armstrong

*Philologie et littérature médiévales*

*Le Théâtre médiéval*

*Le Roman arthurien*

*Littératures et publics du Moyen Age*

Mr. Guggenheim

*Rousseau et le préromantisme*

*Voltaire (Semester I, 1988-89)*

*Techniques narratives du XIX<sup>e</sup> et XX<sup>e</sup> siècles*

*Précieux, mondains et moralistes du XVII<sup>e</sup> siècle*

Miss Lafarge

*Stendhal et Flaubert*

*Marivaux, Giraudoux*

*Diderot*

*Le Roman du XVIII<sup>e</sup> siècle*

Mr. Maurin

*Le Romantisme (Semester I, 1988-89)*

*L'Autobiographie de Chateaubriand à Sartre*

*Valéry, Gide*

*Romancières du XX<sup>e</sup> siècle*

*Montherlant et Sartre*

*Le Théâtre moderne*

*Claudél et Mauriac*

*Baudelaire*

*Mallarmé*

*Proust et Gide*

*Verlaine, Rimbaud*

*Du Romantisme au Parnasse*

### SELECTED UNDERGRADUATE COURSES

- 301 *Le Roman courtois*
- 306 *Le Roman du XVIII<sup>e</sup> siècle (Semester I, 1988-89)*
- 308 *Baudelaire*
- 309 *Verlaine, Rimbaud*
- 310 *Essayistes du XX<sup>e</sup> siècle*
- 311 *Le Théâtre au XX<sup>e</sup> siècle*
- 314 *Gide et Sartre*
- 315 *Women Writers (Semester I, 1988-89)*
- 318 *Le nouveau roman*
- 350 *Voix médiévales et échos modernes*
- 351 *Poésie maniériste et baroque*



- 352 *La Vision de la femme dans la littérature française*
- 353 *Autobiographies de Chateaubriand à Sartre*
- 354 *Ecrivains engagés de Montaigne à Sartre*
- 355 *Techniques narratives*

Courses offered at the *Institut d'Etudes Françaises d'Avignon*:

*Molière or Racine*

*Les Fleurs du mal or Rimbaud*

*Le Surréalisme*

*Travaux de traduction et de stylistique*

*Le roman courtois*

## Geology

*Professors:* Maria Luisa B. Crawford, Ph.D.

William A. Crawford, Ph.D., *Director of Graduate Studies*

Lucian B. Platt, Ph.D.

W. Bruce Saunders, Ph.D., *Chairman*

*Prerequisites.* A bachelor's degree in a natural science or mathematics. Students who have not majored in geology will be expected to make up deficiencies in their preparation during their first year of graduate study. Applicants must submit scores in the Aptitude Test of the Graduate Record Examinations.

*Major and Allied Subjects.* Students may specialize in geochemistry, mineralogy-petrology, paleontology-stratigraphy, sedimentology, or regional and structural geology. The allied subject for the Ph.D. may be either another field of geology or any one of the other natural sciences or mathematics; other subjects may be accepted in special cases.

*Language Requirements and Special Skills Options.* For the M.A., degree proficiency in one of the following languages: Russian, German, or French, or proficiency in digital computation or statistics. Candidates for the Ph.D. degree may offer two foreign languages from the following: Russian, German, or French, or one language from this list and proficiency in digital computation or statistics. Language skills will be tested by examinations administered by the Department of Geology



under the supervision of the Graduate School of Arts and Sciences. The results are confirmed by the appropriate language department. The proficiency in digital computation or statistics will be tested by the department or may be demonstrated by the satisfactory completion of an appropriate course.

*Research and Teaching Requirement.* Active engagement in research and the development of advanced research skills are required for a graduate degree in geology. This research requirement may be met in various ways, including registration for units of independent research, registration for supervised research on the dissertation topic, participation in a research project as a formally designated research assistant, or a combination of these.

Students are also expected to participate in the teaching functions and other work of the department.

*Program and Examination for the M.A.* At least six semester courses are required, two of which will consist of a field or laboratory research project under the direction of a member of the faculty. The results of the research project must be reported in a master's thesis. The student must also pass a three-hour written examination at the end of the third semester and a one-hour oral thesis defense after the final draft of the thesis has been accepted by the committee.

*Program and Examination for the Ph.D.* Candidates will spend a major portion of their time on a research problem; ordinarily, this will involve field mapping and collecting, together with laboratory study. At least twelve units of course work must be taken; the total number of units will depend on the student's preparation. A set of preliminary examinations which test general knowledge in geology, knowledge in the candidate's special field, and either an allied subject or an additional field in geology must be passed before the student becomes deeply involved in the research project. A final examination follows the completion of the Ph.D. dissertation. This examination is devoted to the dissertation and the field in which it has been written.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

Two or three courses or seminars are offered each semester in the general areas listed below. These are usually chosen so that each is offered once every other year. The specific content of the courses and seminars is determined by the current interests of faculty and students. Students wishing to do so may also attend graduate courses at the University of Pennsylvania under the Reciprocal Plan (see page 17).

Mr. Crawford

*Thermodynamics for Geologists and Analytical Techniques*  
Theory and application of thermodynamics for solving geological problems combined with instruction in wet chemical and instrumental means of silicate analysis.

*Igneous Petrology*

Selected subjects in the structure, physical chemistry, and origin of igneous rock. Prerequisite: *Thermodynamics for Geologists* or its equivalent.

Mrs. Crawford

*Metamorphism*

The physical and chemical processes of metamorphism, accompanied by regional studies. Prerequisite: *Thermodynamics for Geologists* or its equivalent.

*Advanced Mineralogy*

The study of selected rock-forming mineral groups accompanied by instruction in optical, chemical and x-ray techniques.

Mr. Platt

*Structural Geology*

Modern concepts in structural geology and theories of deformation.

*Tectonics*

Stratigraphic and structural relations of mountain ranges leading to analysis of their origin.

Mr. Saunders

*Paleontology*

Study of selected animal groups in geologic time.

**SELECTED UNDERGRADUATE COURSES  
THAT MAY BE TAKEN (WITH ADDITIONAL WORK)  
FOR GRADUATE CREDIT**

|     |  |
|-----|--|
| 301 | <i>Geochemistry</i>                      |
| 302 | <i>Aqueous Geochemistry</i>              |
| 303 | <i>Advanced Paleontology</i>             |
| 304 | <i>Tectonics</i>                         |
| 305 | <i>Igneous and Metamorphic Petrology</i> |
| 306 | <i>Sedimentology</i>                     |
| 307 | <i>Stratigraphy</i>                      |
| 308 | <i>Economic Geology</i>                  |
| 310 | <i>Introduction to Geophysics</i>        |

## **Greek**

*Professors:* Richard Hamilton, Ph.D., *Chairman*  
Mabel L. Lang, Ph.D.

*Associate Professor:* Gregory W. Dickerson, Ph.D.

*Prerequisites.* An undergraduate major or minor in Greek, based on at least three, preferably four years of college Greek, or the equivalent, with representative reading from Greek literature and history which, in the opinion of the department, provides an adequate basis for graduate work. It is expected that all graduate students in Greek will have some knowledge of Latin. All candidates must submit scores in the Aptitude Test of the Graduate Record Examinations. Candidates for the Ph.D. degree must first complete an M.A. degree.

*Allied Subjects.* Any literature, ancient or modern; ancient history; ancient philosophy; classical archaeology; linguistics.

*Language Requirements.* Latin, French, and German for both the M.A. and the Ph.D. Language skills will be tested by examinations administered by the department or by the GSFLT for French and German. Entering students may offer scores of the GSFLT taken during the twelve months previous to the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* The program consists of six units of graduate work in Greek or four units in Greek and two units in an allied field. Before admission to the final examination candidates must pass an examination in Greek sight translation and complete the M.A. paper. The final examination consists of a three-hour written examination on two of the fields covered by the student's seminars and an oral examination of one hour on the field of the paper.

*Program and Examinations for the Ph.D.* Before admission to the preliminary examinations candidates must pass a rigorous examination in Greek sight translation. The preliminary examinations consist of four written papers, one of which shall be an allied subject, and an oral examination. The fields from which the three major papers may be selected include: epic poetry (with emphasis on Homer), lyric poetry (with emphasis on Pindar), tragedy, comedy, the orators, the historians, the Pre-Socratics, Plato, Hellenistic poetry, Greek religion, and various periods of Greek history. The final examination is devoted to the dissertation and the field in which it has been written.

*Fellowships for Excellence in the Classics.* In addition to the regular fellowships and scholarships, three special Fellowships for Excellence in the Classics are awarded each year on the recommendation of the Classical Committee to new students in the Departments of Classical and Near Eastern Archaeology, Greek, and Latin.

*Classical Languages and Classical Studies.* For M.A. and Ph.D. degrees in both Greek and Latin and in combinations of either or both languages with Classical Archaeology, see classical Languages and Classical Studies.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS

Seminar topics are determined for each semester in consultation with the graduate students. The seminars are selected from the following:

Mr. Dickerson  
*Aeschylus*  
*Sophocles*

Mr. Hamilton  
*Euripides*  
*Pindar and Greek Lyric*

Mr. Dickerson and Mr. Hamilton  
*Aristophanes*  
*Greek Religion*  
*Athenian Society*

Miss Lang  
*Herodotus*  
*Problems in Athenian History*  
*Thucydides*  
*Homer*

### SELECTED UNDERGRADUATE COURSES

The following undergraduate courses are open to graduate students in other fields.

- 101        *Herodotus*: Mr. Dickerson  
104        *Homer's Odyssey*: Mr. Hamilton  
201, 202   *Plato and Thucydides; Tragedy*: Mr. Hamilton, Mr.  
             Dickerson  
251        *Philosophical Readings*: Mr. Hamilton  
301, 302   *Hesiod and Pindar; Aeschylus and Aristophanes*:  
             Mr. Hamilton, Mr. Dickerson

## History

*Professors*: Charles M. Brand, Ph.D.  
              Arthur P. Dudden, Ph.D., *Chairman*  
              Barbara M. Lane, Ph. D.  
              J.H.M. Salmon, Lit.D.  
              Alain Silvera, Ph.D., *Director of Graduate Studies*  
              James Tanis, Th.D., *Director of Libraries*

*Associate Professor*: Jane Caplan, D.Phil.

*Assistant Professor of Chinese Studies in History and Political Science*: Michael Nylan, Ph.D.



*Instructor:* Elizabeth Fisher-Gray, A.M.

*Andrew W. Mellon Postdoctoral Fellow and Lecturer:*  
William Clark, Ph.D.

*Fields of Study:* Master's and doctoral programs develop from seminars and courses available. Research for theses and dissertations grows out of seminars and units offered by the Department of History and those allied with it.

*Prerequisites.* A thorough undergraduate preparation in history, the humanities, and the social sciences. Students who wish to work in ancient or medieval fields must be able to read the essential ancient languages. Those planning work in modern European history or American history must have a reading knowledge of one modern language, preferably French or German, upon entrance. Those planning doctoral programs should have two languages upon entrance or acquire the second language at once. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr. Applicants must submit scores in the Aptitude Test of the Graduate Record Examination and a sample of recent historical writing.

*Language Requirements.* At least one modern foreign language, to be approved by the department, is required of M.A. degree candidates. The language examination given by the department or the GSFLT must be attempted before the end of the first semester's work; the examination must be passed before the end of the following summer or before candidacy for the degree is requested, whichever is earlier.

At least two modern foreign languages, the choice of which must be approved by the department during the student's first academic year, are required of the Ph.D. candidates. Students entering with an A.B. must attempt the departmental language examination or the GSFLT before the end of the first semester's work and must pass the examination in one language before they may enter upon a third semester of work. They must attempt an examination in the second language no later than their third semester of work and must pass an examination on this second language before they may enter upon a fifth semester of work. Students entering with an M.A. must attempt examinations in both languages before the end of their first semester and must pass examinations in both before they may enter upon a third semester of work. The time limit for part-time students is



determined by the academic year, not by the number of units completed. Candidates for the Ph.D. in ancient or medieval history must also demonstrate the ability to read one classical language. Directors of research may also require demonstration of ability in special techniques.

In practice, proof of language facility should be established early in the second semester of work to enable the student to enter upon a third semester of work. In addition, since financial aid decisions are made early in Semester II, often before Semester II language examinations are completed, students applying for financial aid for the succeeding academic year should demonstrate language competence before the end of Semester I.

*Program and Examination for the M.A.* The program consists of six units of work in history or in history and an allied field, together with a thesis and a final examination. The final examination is written and is usually four hours in length.

*Program and Examinations for the Ph.D.* All students are expected at some time to take a seminar or course in which aspects of historiography and historical method are studied. The preliminary examinations test the student's competence in four fields of history or in three fields of history and one field in an allied subject. For example, allied work in medieval literature, art, or philosophy is usually recommended to students of medieval history, and one of these may be offered in the preliminary examinations.

The preliminary examination may, at the student's choice, consist of a four-hour written exercise in one field followed by a two- and one-half-hour oral interrogation on three fields, or four-hour written exercises in each of the student's four fields followed by a comparatively brief oral interrogation covering all four fields. The field of the projected dissertation will be included in the preliminary examinations.

Students whose dissertations are in American history will be required to take at least two fields in modern European history. Students specializing in modern European history must offer some medieval history for examination. The final oral examination is devoted to the dissertation and the field in which it has been written; plans for publication will also be reviewed. The department reviews each student's progress and plans for work at all stages.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

The seminars are arranged to allow the fullest possible choice for students over a two- or three-year period of study. Normally the same seminar will not meet two years in succession. Topics listed below indicate the areas in which seminars will be offered according to the needs of students and the current research interests of the faculty.

### *Ancient History*

Students should consult pages where the offerings of the Departments of Greek and Latin are listed.

### *Byzantine and Medieval Europe*

Mr. Brand

*Topics in Medieval History*  
*The Fifth and Sixth Centuries*  
*The Twelfth Century*  
*Venice from the Tenth through the Thirteenth Centuries*

### *Early Modern Europe*

Mr. Salmon

*Early Modern French History*  
*Early Modern European Political Theory*

Mr. Tanis

*The Reformed Reformation in Northern Europe*  
*Selected Topics in Sixteenth- and Seventeenth-century Dutch History*

### *Modern European History*

Ms. Caplan

*Modern Germany*  
*Topics in the History of Nineteenth- and Twentieth-century Europe and Britain*

Mr. Silvera

*Europe and the Near East*  
*Topics in Modern European History*

## *American and British History*

Mr. Dudden

*The New Deal and the Great Society*

*The United States in the World of the Twentieth Century*

Ms. Fisher-Gray

*Creating American Identities, 1607-1800*

Mr. Tanis

*Puritanism and the Great Awakening*

### *Methodology and Historiography*

Ms. Caplan

*Recent Themes and Approaches in European Historiography*

Mr. Krausz

*Philosophy of History* (offered in the Department of Philosophy)

Mr. Salmon

*Early Modern European Historiography*

*Political Ideas and Institutional History* (emphasis on France)

Mr. Tanis

*Historiography of the Reformation*

## **SELECTED UNDERGRADUATE COURSES**

- 301        *Topics in the History of Modern Architecture:* Mrs. Lane
- 302, 303   *Topics in Recent U.S. History:* Mr. Dudden
- 312        *Medieval Cities:* Mr. Brand
- 317        *Mexico: Independence to the Present*
- 320        *Rise of the Dutch Republic:* Mr. Tanis
- 321        *Golden Age of the Netherlands:* Mr. Tanis
- 323        *Dutch-American Relations, 1609-1809:* Mr. Tanis
- 324        *Northern Reformation:* Mr. Tanis
- 327        *Topics in American Colonial History:* Ms. Fisher-Gray
- 328        *Topics in Revolutionary Europe:* Mr. Silvera
- 330, 331   *France since 1870:* Mr. Silvera

|          |  |
|----------|--|
| 340      | <i>Religious Forces in Colonial America:</i> Mr. Tanis     |
| 345      | <i>Valois France and Tudor England:</i> Mr. Salmon         |
| 346      | <i>Bourbon France and Stuart England:</i> Mr. Salmon       |
| 353      | <i>Topics in Chinese History:</i> Ms. Nylan                |
| 360      | <i>England under the Tudors and Stuarts:</i> Mr. Salmon    |
| 362      | <i>France: 1559-1661:</i> Mr. Salmon                       |
| 368      | <i>Topics in Medieval History:</i> Mr. Brand               |
| 370,371  | <i>The Great Powers and the Middle East:</i> Mr. Silvera   |
| 391      | <i>Topics in the History of European Women:</i> Ms. Caplan |
| 394      | <i>Women's Labors: England, 1830-1880:</i> Ms. Caplan      |
| 396, 397 | <i>History of History, I and II:</i> Mr. Salmon            |
| 403      | <i>Supervised Work</i>                                     |

## History of Art

*Professors:* Dale Kinney, Ph.D.  
Steven Z. Levine, Ph.D.  
James Synder, M.F.A., Ph.D.

*Associate Professors:* David Cast, Ph.D., *Chairman*  
Gridley McKim-Smith, Ph.D.

*Professor of Classical and Near Eastern Archaeology and of History of Art:* Phyllis Pray Bober, Ph.D.

*Professor of History:* Barbara Lane, Ph.D.

*1988-89 J. Paul Getty Postdoctoral Fellow:* Celia Chazelle, Ph.D.

*Field of Study.* The history of western European art from late antiquity through the present; strong emphasis on architecture, art theory and criticism, the classical tradition and its permutations, general methodology.

*Prerequisites.* Strong undergraduate training in art history or cognate disciplines such as history, classics, literature, or language; also reading knowledge of French, German, or Italian. Applicants should submit a sample of scholarly writing and research, as well as scores in the Aptitude Test of the Graduate Record Examinations.

*Language Requirements.* All students must demonstrate proficiency in German and one Romance language for the M.A. or Ph.D. degree. Proficiency may be demonstrated in one of two ways: by passing written translation examinations prepared by the department and taken under the supervision of the Graduate School of Arts and Sciences; or by achieving scores in the sixtieth percentile or above on the Graduate School Foreign Language Test (GSFLT) of the Educational Testing Service, if the test is taken while the student is enrolled at Bryn Mawr or within twelve months prior to the student's initial enrollment. In addition, students specializing in medieval or Renaissance art must learn Latin.

*Program and Examinations for the M.A.* Six courses or units of independent work in art history; language examinations as above; an M.A. thesis, and a written examination to test the candidate's ability to place the thesis topic in a larger context.

*Program and Examinations for the Ph.D.* (1) Language examinations as for the M.A.; (2) six courses or units of independent work above the six required for the M.A.; courses may be taken in other departments at Bryn Mawr or at the University of Pennsylvania; students devise their own course programs with interdisciplinary focus on the field or period of art history in which they intend to find the subject of their Ph.D. dissertation; (3) written and oral Ph.D. preliminary examinations in four discrete fields, selected by the student with departmental consultation and approval; (4) a dissertation presenting an original thesis corroborated by primary research; the research nearly always is done abroad.

*General Degree Requirements for the M.A. and the Ph.D.* See Pages 20-22.

*Kress Program:* The department participates in the Samuel H. Kress Foundation Fellowship Program. See page 96.

## SEMINARS AND GRADUATE COURSES

Seminar topics change annually, in accordance with the direction of faculty members' current research. In addition to seminars, students may register for units of independent work on

topics of particular interest to them individually. Recently offered seminars include:

Mrs. Kinney

*Early Christian Ivories*

*The Iconography of Early Medieval Architecture*

*Principles of Medieval Iconography*

Mr. Snyder

*Topics in Dutch Painting*

*Van Eyck*

*Art of the Valois Courts*

Mrs. Bober

*Antiquity in the Renaissance*

*Topics in Roman Sculpture*

Mr. Cast

*Problems in Renaissance Architecture*

*Vasari*

*Historiography of Art*

Mrs. McKim-Smith

*Velasquez*

*Interpretation of Technical Data*

*Problems in Representation*

Mr. Levine

*Mythological Representations of the Body*

*Monet*

*Art and Psychoanalysis*

Mrs. Lane

*Problems in Modern Architecture*



# Human Development

*Professors:* Robert H. Wozniak, Ph.D, *Chairman and Director of Child Study Institute*  
Emmy A. Pepitone, Ph.D.

*Assistant Professors:* Leslie A. Rescorla, Ph.D.  
Mary McCaslin Rohrkemper, Ph.D.

*Lecturers:* Peter Goldenthal, Ph.D.  
Katherine M. Gordon-Clark, Ph.D.  
Polly Young-Eisendrath, Ph.D.

*Laboratory Coordinators:* Barbara Lorry, Ph.D.  
Carol Roberts, Ph.D.

The Department of Human Development offers a broad program of graduate course work integrated around a conception of the developing individual in changing family, school, and societal contexts. Students obtain an understanding of basic human psychological processes in their development across the life-span and acquire the skills needed to conduct effective research on these processes. As students advance in the program, they choose four areas of relative specialization from the following: developmental psychopathology, educational psychology, family theory, life span developmental psychology, psychological assessment, social psychology, and social psychology of education. In addition to this general program of study, the department also offers two more specialized programs to which students can apply:

**Clinical Developmental Psychology Program.** This program offers doctoral training in psychological theory, research, and clinical practice within a life-span developmental framework. The focus of the program is on children and families within the larger social contexts of school and community. The theoretical and clinical orientation is broad. Students have the opportunity to engage in research in a variety of settings, become proficient in psychological assessment, gain experience with preschool children, work with clients using both individual and family therapy, and obtain certification in school psychology. Department graduates are professionally engaged in clinical teaching, supervision, research, and practice, as well as in consultation and program evaluation.

**School Psychology Program.** School psychologists in educational or clinical settings seek to help children and adolescents fulfill their potential in the areas of academic achievement, socio-emotional growth, and adaptive competence. Students in the School Psychology Program receive training in theory and research in psychoeducational assessment, educational psychology, and learning disabilities. They study the school as a social system, receive supervised training in therapeutic and educational intervention in schools, and gain experience in consultation with teachers and parents. Graduates of Bryn Mawr's School Psychology Program receive Pennsylvania State certification in school psychology. This enables them to work professionally in a variety of settings, including schools, hospitals, early intervention programs, pupil service agencies, and community mental health centers.

*General Prerequisites.* Undergraduate preparation should include coursework in general and developmental psychology and in statistics. Students whose undergraduate training in psychology is inadequate may be required to take appropriate undergraduate courses to supplement their preparation.

*Application.* Applicants must submit scores from the Graduate Record Examination and a statement of their academic goals. Students wishing admission to the Clinical Developmental Psychology Program must apply specifically to that program as well as to the department. Deadline for the receipt of applications is February 1.

*Language and Statistics Requirements.* For completion of both the M.A. and Ph.D., students are required to pass an examination in one modern foreign language and to demonstrate competence in statistics and research design. The latter requirement may be satisfied by successful completion of the one-year course in Foundations of Research. Foreign language skills are assessed by examinations administered by the Department of Human Development and evaluated jointly with faculty in the appropriate modern language departments.

*Program and Examination for the M.A. in Human Development.* Candidates for the M.A. in Human Development must complete at least six units of graduate work in Human Development. A thesis reporting the results of an independent research project must be successfully completed as must examinations in

two areas of M.A. specialization and a final one-hour oral examination on the thesis.

*Program and Examination for the Ph.D. in Human Development.* Candidates for the Ph.D. in Human Development must complete at least twelve units of graduate work in the Department of Human Development or in allied departments. They must successfully complete a pre-dissertation research project and a series of written preliminary examinations in each of four areas of specialization. Dissertation research must make a substantive contribution to the field. This research and the general area in which it has been written form the basis for the final oral examination.

*Program and Examination for the Ph.D. in Clinical Developmental Psychology.* Candidates for the Ph.D. in Clinical Developmental Psychology must fulfill all of the requirements for the Ph.D. in Human Development. In addition, students in the Clinical Developmental Psychology Program typically complete an additional six units of coursework, a minimum of four semesters of clinical practica (1000 hours+), and a one-year, full-time predoctoral internship.

*Program for State Certification in School Psychology.* In order to obtain certification in school psychology, students must have obtained a master's degree in a specialty relevant to school psychology (e.g., human development, learning disabilities, psychology), must take at Bryn Mawr or have taken at another institution, coursework in ten competency areas, and must complete a one-year, half-time supervised practicum in school psychology. Certification in school psychology is available as an option for students pursuing coursework leading to the Ph.D. in human development or the Ph.D. in clinical developmental psychology.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

**Child Study Institute.** Child Study Institute (CSI) is the clinical training facility of the Department of Human Development. Staffed by licensed psychologists (including members of the department faculty), reading and math specialists, and predoctoral trainees in the Clinical Developmental and School Psychology Programs, the Child Study Institute offers diagnos-

tic assessments; school admission testing; individual, family, and group psychotherapy; and reading, math, and study skills tutoring. Problems of assessment, language delay, reading disability, and psychotherapy outcome are central to the work of the clinic and focal research interests of department faculty and students.

**The Phebe Anna Thorne School.** In existence from 1913–1930 as a model school educating children through the 12th grade, the Phebe Anna Thorne School was reestablished in 1952 as a nursery school and preschool research laboratory for the Department of Human Development. The Thorne School offers two morning programs (one for three- and one for four-year-olds) and a single afternoon program for three- and four-year-olds combined. The Thorne School is staffed by a director, two head teachers, and three graduate students in the Department of Human Development who work as assistant teachers.

### SEMINARS AND GRADUATE COURSES

Seminars and graduate courses are selected from the following. Some courses are offered only in alternate years; some are offered on demand. In many courses, participation in discussion sections or clinical practicum placements is required.

Mr. Goldenthal

*Methods of Psychotherapy with Children and Families*

Ms. Gordon-Clark

*Introduction to Psychological Assessment*

Ms. Lorry

*Introduction to Psychological Assessment*

Ms. Pepitone

*Social Theories*

*Advanced Social Psychology*

*Social Issues in Education*

*Family Theories*

Ms. Rescorla

*Developmental Cognitive Disorders*

*Advanced Psychological Assessment*

*Developmental Psychopathology*

*Advanced Abnormal Psychology*

Ms. Roberts  
*Advanced Psychological Assessment*

Ms. Rohrkemper  
*Foundations of Research*  
*Educational Psychology*  
*Advanced Educational Psychology*

Mr. Wozniak  
*Life Span Developmental Psychology*  
*Historical and Ethical Issues in Clinical Developmental Psychology*  
*Advanced Developmental Psychology*

Ms. Young-Eisendrath  
*Life Span Developmental Psychology*

### SELECTED UNDERGRADUATE COURSES

- |     |  |
|-----|--|
| 202 | <i>Social Foundations of Education:</i> Ms. Pepitone |
| 203 | <i>Educational Psychology:</i> Ms. Rohrkemper        |
| 206 | <i>Developmental Psychology:</i> Mr. Wozniak         |
| 207 | <i>Adolescent Development:</i> Ms. Rohrkemper        |
| 209 | <i>Abnormal Psychology:</i> Ms. Rescorla             |

## Latin

*Professors:* Julia Haig Gaisser, Ph.D., *Chairman*  
Russell T. Scott, Ph.D.  
Myra L. Uhlfelder, Ph.D.

*Prerequisites.* An undergraduate major or minor consisting of at least three years of Latin in college. All graduate students in Latin are expected to have begun the study of Greek. Scores in the Aptitude Test of the Graduate Record Examinations should be submitted.

*Allied Subjects.* The department recommends as allied subjects: Greek, classical archaeology, ancient history, linguistics, or, for students whose special interest is in the medieval period, medieval history or a vernacular literature.



*Language Requirements.* French and German are required for both the M.A. and the Ph.D. Language skills will be tested by examinations administered by the department. Candidates for advanced degrees must also demonstrate satisfactory competence in Latin composition by examination or course work.

*Program and Examination for the M.A.* Candidates will normally offer four units of work in Latin and two units in an allied field. Candidates must pass a test in Latin sight translation and complete the M.A. paper before being admitted to the final examination. The final examination consists of a three-hour written and a one-hour oral examination on the field of the M.A. paper.

*Program and Examinations for the Ph.D.* Candidates will normally complete a two-year program of eight units of work in Latin and four in an allied field. Six of these units may be offered for the M.A. degree, which usually forms part of the doctoral program. Candidates should then undertake a program of independent reading planned to enable them to pass the preliminary examinations as soon as possible, after which they will concentrate on the dissertation. In some cases it may be advisable to carry two to four more units of work in the third year. The preliminary examinations consist of two four-hour written papers on Latin literature; one four-hour written paper on a special field such as a particular period of Roman history, the works of a special author, medieval Latin literature, or the history of classical scholarship; one four-hour written paper in the field of the allied subject; and a general oral examination. Students whose major interest is in the medieval period will take the two examinations in Latin literature, one in medieval Latin literature, and a fourth in a field related to the Middle Ages or to the transmission of the classics. Before admission to the preliminary examinations, all students must pass tests in sight translation of Latin and Greek. The final examination is devoted to the dissertation and the field in which it has been written.

*Fellowships for Excellence in the Classics.* In addition to the regular fellowships and scholarships, three special Fellowships for Excellence in the Classics are awarded each year on the recommendation of the Classical Committee to new students in the Departments of Classical and Near Eastern Archaeology, Greek, and Latin.

*Classical Languages and Classical Studies.* For M.A. and Ph.D. degrees in both Greek and Latin and in combinations of either or both languages with Classical Archaeology, see Classical Languages and Classical Studies.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS AND GRADUATE COURSES

The program includes a wide range of courses in classical and medieval literature and civilization. Seminar topics are determined for each semester in consultation with the graduate students.

Mrs. Gaisser

*Roman Elegy*

*Vergil: the Aeneid*

*Lucretius*

*The Alexandrian Tradition in Roman Poetry*

Mr. Scott

*Roman Politics of the First Century, B.C.*

*Roman Biography*

*Early Rome*

*Imperial History*

*Roman Satire*

Miss Uhlfelder

*Augustine and the Classical Tradition*

*Boethius*

*Literature of the High Middle Ages*

*Late Imperial Literature*

*Classical Rhetoric*

*Ciceronian Dialogues*

## SELECTED UNDERGRADUATE COURSES

301     *Vergil's Aeneid:* Mrs. Gaisser

# Mathematics

*Professors:* Frederick Cunningham, Jr., Ph.D.  
Rhonda Hughes, Ph.D., *Chairman*  
Marvin I. Knopp, Ph.D.  
Mario Martelli, Ph.D.

*Associate Professor:* Paul Melvin, Ph.D.

*Assistant Professor:* Kyewon Park, Ph.D.

The Department of Mathematics will accept applications from students who wish to work toward the M.A. or Ph.D. Financial aid is available in the form of tuition scholarships and teaching assistantships. This aid is available for both full-time and part-time students.

*Prerequisites.* Strong undergraduate preparation and three letters of recommendation are required. Since the program is small only the very best candidates can be admitted. Applicants are therefore urged to consult the chairman and seek a personal interview with the members of the department whenever possible.

*Major and Allied Subjects.* Students may specialize in any of the broad divisions of mathematics (algebra, analysis, topology, or applied mathematics) but are expected also to acquire a well-rounded knowledge of the subject as a whole. Certain courses in physics, chemistry, or philosophy (logic) are accepted as allied work.

*Special Skills Requirements.* For both the M.A. and the Ph.D. degree one foreign language is required, normally French, German, or Russian. For the Ph.D. degree an additional foreign language or proficiency in computing is required. Language and computer skills will be tested by examinations administered by the department or may be demonstrated by the satisfactory completion of appropriate courses approved by the department. Any foreign language, other than the ones listed above, must be approved by the department.

*Program and Examination for the M.A.* The program consists of four units of work in mathematics and two additional units in mathematics or an allied field. Advanced undergraduate courses which supplement the student's preparation may under certain

conditions be taken for graduate credit. An M.A. paper is required and is presented in a seminar talk. The final examination is a one-hour oral examination focusing on the area of the M.A. paper.

*Program and Examinations for the Ph.D.* Candidates will take such courses and seminars as are needed to provide a broad foundation. As they progress they will devote an increasing portion of their time to individual study and research under the direction of a member of the department. The preliminary examinations consist of three four-hour written examinations, followed by a one-hour oral, and are intended to test the candidate's breadth of knowledge and understanding of the structure of mathematics as a whole. They are taken either in one five-week period, or in two two-week periods separated by at most six months. The final examination is oral and is devoted to the candidate's special field and the subject of the dissertation.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20–22.

## SEMINARS AND GRADUATE COURSES

At least one basic graduate course is given each year, which may be among the following: real analysis, complex analysis, topology, or algebra. Additional seminars are offered in selected topics in response to the needs and interests of students and faculty. Students are also encouraged to take advantage of the reciprocity agreement with the University of Pennsylvania (See page 17). Advanced work in the graduate program consists primarily of reading and research under the direction of members of the department.

Mr. Cunningham

*Functional Analysis*

*Harmonic Analysis*

*Algebra*

Ms. Hughes

*Real and Complex Analysis*

*Measure Theory*

*Operator Theory*

Mr. Knopp  
*Analytic Number Theory*  
*Complex Analysis*  
*Modular Functions*

Mr. Martelli  
*Differential Equations*  
*Dynamical Systems*  
*Non-linear Functional Analysis*

Mr. Melvin  
*Algebraic and Differential Topology*  
*Low Dimensional Manifolds*  
*Differential Geometry*

Ms. Park  
*Ergodic Theory*  
*Dynamical Systems*  
*Real Analysis*

## SELECTED UNDERGRADUATE COURSES

|         |  |
|---------|--|
| 301-302 | <i>Introduction to Real Analysis</i>             |
| 303-304 | <i>Abstract Algebra</i>                          |
| 306     | <i>Mathematical Physics</i>                      |
| 311     | <i>Differential Equations</i>                    |
| 312-313 | <i>Topology</i>                                  |
| 322-323 | <i>Theory of Functions of a Complex Variable</i> |

## Philosophy

Professors: George L. Kline, Ph.D.  
Michael Krausz, Ph.D.  
George E. Weaver, Jr., Ph.D.

Associate Professor: Robert J. Dostal, Ph.D., *Chairman*

Professor of Political Science: Stephen G. Salkever, Ph.D.

Andrew W. Mellon Postdoctoral Fellow and Lecturer:  
J.D. Trout, Ph.D.



*Prerequisites.* In general, an undergraduate major in philosophy is required. Students whose undergraduate training does not include a major in philosophy may be required to take such undergraduate courses as the department considers necessary. All applicants are required to submit scores in the Aptitude Test of the Graduate Record Examinations.

*Allied Subjects.* Subjects in most fields of the humanities, mathematics, and natural and social sciences.

*Language Requirements.* One modern language for the M.A., French and German for the Ph.D. At the discretion of the department, another language may be substituted for French or German when the student's research requires it.

Language proficiency will be tested by examinations administered by the department. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* Six units of work in philosophy or in philosophy and an allied field. The final examination is usually written and is four hours in length.

*Program and Examinations for the Ph.D.* All students must demonstrate competence in logic before receiving the Ph.D. This requirement may be met in several ways: by successful completion, before admission to candidacy, of an intermediate course or graduate seminar in logic; by special examination before admission to candidacy; or by passing a preliminary examination in the systematic field of logic. The preliminary examinations will consist of four written examinations, two of which are to be in systematic fields and two in authors or periods.

Students are expected to bring to the program or develop while in residence, the following areas of competence: (1) the history of philosophy from the Ancients through Kant, excluding medieval philosophy; (2) the systematic areas of value theory (at least one of ethics, political philosophy, and aesthetics), metaphysics, epistemology, and logic. Students who, in the department's opinion, are weak in one of these areas may be asked to take appropriate courses or seminars. In addition, students are expected to develop four areas of special competence. These areas are tested by preliminary examinations.

*General Degree Requirements for the M.A. and Ph.D.* See pages 20-22.

*Graduate Philosophy Colloquium.* Graduate students are encouraged to participate in the monthly meetings of the graduate Philosophy Colloquium. Papers are read by faculty and students of Bryn Mawr as well as by visiting lecturers. In addition, both the Fullerton Club and the Philadelphia Logic Colloquium hold their monthly meetings at Bryn Mawr, and the graduate students are invited to attend.

*Greater Philadelphia Philosophy Consortium.* The Department of Philosophy is a member of the Greater Philadelphia Philosophy Consortium of Bryn Mawr College, Temple University, University of Pennsylvania, and Villanova University. Under the terms of this arrangement, graduate students in good standing in any of these institutions may enroll in philosophy courses, without extra fee, at any participating institution, subject to the regulations of their home departments.

## SEMINARS

Most seminars run through the entire year. The choice of seminars to be offered in a particular year depends in part on the interests of the students.

Mr. Dostal

*Phenomenology: Husserl*

*Kant: Critique of Pure Reason and Critique of Judgment*

*Heidegger*

*Hermeneutics*

Mr. Kline

*Ethics*

*Hegel: Phenomenology of Spirit and Philosophy of Right*

*Whitehead*

Mr. Krausz

*Aesthetics*

*Philosophy of History*

*Philosophy of Science*

*Epistemology*

Mr. Salkever  
*Aristotle*  
*Political Philosophy*

Mr. Weaver  
*Introduction to Mathematical Logics*  
*Homogeneous Universal Models*

### SELECTED UNDERGRADUATE COURSES

- 310      *Philosophy of Science*: Mr. Krausz
- 312      *Philosophy of History*: Mr. Krausz
- 316      *Philosophy of Mathematics*: Mr. Weaver
- 317      *Philosophy of Creativity*: Mr. Krausz
- 318      *Philosophy of Language*: Mr. Weaver
- 330      *Kant: Critique of Pure Reason*: Mr. Dostal
- 331      *Hegel*: Mr. Dostal, Mr. Kline

## Physics

*Professors:*      Neal B. Abraham, Ph.D.  
                         Alfonso M. Albano, Ph.D.  
                         Peter A. Beckmann, Ph.D., *Chairman*

*Lecturer:*        David E. Chyla, Ph.D.

*Fields of Study and Research.* The graduate program is designed to give students a broad background in physics and a high degree of expertise in a chosen field of research. Seminars and original research are tailored to meet individual needs and goals, which can include interdisciplinary studies, teaching, and applied research, as well as pure research in theoretical and experimental physics. In theoretical physics, the present research activities in the department involve condensed matter physics, molecular physics, photon statistics and gas laser theory, and nonlinear dynamics. In experimental physics, present activities include nuclear spin relaxation studies in condensed matter using pulsed nuclear magnetic resonance, studies of gas lasers including intrinsic noise and dynamical instabilities, and coherence measurements in quantum optics. Opportunities exist for research in interdisciplinary fields.

*Prerequisites.* An undergraduate major in physics or in a field of study closely allied to physics (e.g., mathematics, chemistry, engineering). Students who have not majored in physics will usually find it necessary to take some undergraduate courses before entering graduate courses and seminars. All applicants for admission to graduate work in physics are requested to submit scores in the Aptitude Test and Advanced Test of the Graduate Record Examinations.

*Special Skills Requirements.* Candidates for the M.A. degree must demonstrate skill in either computing or a foreign language. Candidates for the Ph.D. degree must demonstrate skill both in computing and in a foreign language. To demonstrate skill in computing, a student either must pass satisfactorily a course in computing approved in advance by the department or must write a satisfactory new computer program and pass an examination set by the department. To demonstrate skill in a foreign language, a student must pass an examination set by the department and under the supervision of the Graduate School of Arts and Sciences. The examination involves translation (with dictionary) into English of articles on subjects in physics. Examinations will be given in French, German, or Russian (or some other language by special permission of the department). Alternatively, entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Qualifying Examination.* An oral qualifying examination must be passed by all graduate students. The subject matter of the examination, which is normally taken in the first semester of graduate work, will include only material ordinarily covered in undergraduate physics courses.

*Program and Examinations for the M.A.* The qualifying examination discussed above must be taken during the first year. The six units of work offered for the degree must include the quantum mechanics course and will ordinarily include two units of experimental physics. The paper will usually consist of a report on a special field related to one of the seminars or units of graduate work offered for the M.A. The M.A. examination is a one-hour oral examination.

*Program and Examinations for the Ph.D.* Each student is normally expected to have completed the graduate courses in

quantum mechanics, electromagnetic theory, classical mechanics, and statistical mechanics, or their equivalents; must have a mathematical preparation acceptable as adequate for the Ph.D. degree; and must have passed the oral qualifying examination described above before being recommended for candidacy.

The preliminary examinations are intended to test the candidate's general background and to determine whether it is broad and deep enough to serve as a preparation for original research work in a specialized field. In general, two years of full- or part-time graduate work should prepare the student for these examinations, and candidates for the Ph.D. are urged to submit themselves for examination at this stage of their work. The Ph.D. preliminary examination is made up of three or four closed book examinations totalling twelve hours and a twelve-hour, open book problem set. The problem set is done over a three-day period. At the discretion of the supervising committee, a one-hour oral examination will usually, though not necessarily, be required and it will deal either with material from the written examinations or any aspect of physics or both. Both the closed book examinations and the problem set will cover quantum mechanics, electromagnetic theory, classical mechanics, statistical mechanics, thermodynamics, and special relativity. In addition, the problem set may also cover special topics from condensed matter physics, laser physics/quantum optics, nonlinear dynamics, or other fields of specialty of the student but only insofar as they are used as examples of the major topics.

Unless the candidate has demonstrated adequate acquaintance with experimental physics in other ways, either the research leading to the dissertation must be, at least in part, experimental or the candidate must take a seminar in experimental physics. The final examination will be devoted to the dissertation and the field in which it has been written.

*Research Requirement.* Active engagement in research and the development of advanced research skills are required for a graduate degree in physics. This research may be met in various ways including registration for units of independent research, registration for supervised research on the dissertation topics, participation in a research project as a formally designated research assistant, or a combination of these.

*General Degree Requirements for the M.A. and Ph.D.* See pages 20–22.



*Colloquium.* All members of the department, including graduate students, meet weekly for the discussion of current problems.

## GRADUATE COURSES

Two-semester (year-long) graduate courses (two units) are offered in quantum mechanics and electromagnetic theory and one-semester (one unit) graduate courses are offered in classical mechanics and statistical mechanics. These six units are normally taken in the first two years. Students who have taken equivalent graduate courses elsewhere may be exempted.

### *Physics 501 and 502: Quantum Mechanics*

Mathematical formulation of quantum mechanics, quantum dynamics, theory of angular momentum, symmetry in quantum mechanics, approximation methods, identical particles, scattering theory, relativistic quantum mechanics, Dirac equation.

### *Physics 503 and 504: Electromagnetic Theory*

Electrostatics, dielectrics, magnetic fields of constant currents, magnetic materials, Maxwell's equations and applications, electromagnetic waves, wave guides, selected applications, special topics.

### *Physics 505: Classical Mechanics*

Lagrange's equations, variational principles, central force problems, rigid body kinematics, rigid body dynamics, small oscillations.

### *Physics 507: Statistical Mechanics*

Brief review of thermodynamics, microcanonical, canonical and grand canonical ensembles, Boltzmann, Fermi-Dirac and Bose-Einstein statistics and applications to classical and quantum ideal gases, the radiation field and simple crystals, non-ideal gases, phase transitions, special topics.

## SEMINARS

The seminars reflect both the research activities of the faculty and the research interests of the students. As a result, contents are flexible and are chosen to satisfy the needs of individual students and to incorporate recent developments in each field. Seminars may cover either one or two semesters (one or two units). Those listed below are intended only to be representa-

tive, offerings in any given year being determined by student needs. Under the Reciprocal Plan, students may also take graduate courses at the University of Pennsylvania. See page 17.

Mr. Abraham

*Quantum Optics*

*Laser Physics*

*Non-linear Phenomena*

Mr. Albano

*Advanced Statistical Mechanics*

*Dynamical Systems*

*Non-linear Dynamics*

*Advanced Quantum Mechanics*

Mr. Beckmann

*Solid State Physics*

*Molecular Physics*

*Magnetic Resonance*

*Use of Group Theory in Physics*

## SELECTED ADVANCED UNDERGRADUATE COURSES

|     |   |
|-----|---|
| 301 | <i>Elementary Quantum Mechanics</i>       |
| 302 | <i>Quantum Mechanics and Applications</i> |
| 303 | <i>Statistical and Thermal Physics</i>    |
| 304 | <i>Advanced Topics In Physics</i>         |
| 305 | <i>Advanced Electronics</i>               |
| 306 | <i>Mathematical Physics</i>               |
| 307 | <i>Solid State Physics</i>                |
| 308 | <i>Advanced Classical Mechanics</i>       |
| 309 | <i>Advanced Electromagnetic Theory</i>    |
| 331 | <i>Modern Physics Laboratory</i>          |

## Psychology

Professors: Richard C. Gonzalez, Ph.D.  
Howard S. Hoffman, Ph.D., *Director of Graduate Studies*  
Margaret Hollyday, Ph.D.  
Clark McCauley, Jr., Ph.D.  
Earl Thomas, Ph.D.  
Matthew Yarczower, Ph.D., *Chairman*

*Prerequisites.* Undergraduate training in psychology is recommended, but outstanding applicants with training only in related fields may be accepted. Students who have not majored in psychology as undergraduates may find it necessary to devote a substantial portion of the first year to undergraduate courses. All applicants must submit scores on the Aptitude Test and Advanced Test of the Graduate Record Examinations.

*Major and Allied Subjects.* The orientation in the various fields is experimental, and there are no facilities for clinical training. The department currently is coordinating efforts with the Department of Human Development in order to provide programs which will utilize the resources of both departments. Also, the department, in collaboration with the Department of Biology can offer a program in neural and behavioral sciences.

*Language Requirements and Special Skills Options.* Candidates for the M.A. must pass an examination in one foreign language (French, German, Russian, or Spanish) or demonstrate satisfactory knowledge of statistics.

Candidates for the Ph.D. must offer two foreign languages: French and German (or some other foreign language with permission of the department) or one foreign language and statistics. The statistics requirement may be fulfilled by passing an approved graduate course in statistics or by an examination administered by the department. Language skills will be tested by the examination administered by the department.

*Research Requirement.* Active engagement in research and the development of advanced research skills are required for a graduate degree in psychology. This research requirement may be met in various ways, including registration for units of independent research, registration for supervised research on the dissertation topic, participation in a research project as a formally designated research assistant, or a combination of these.

*Program and Examination for the M.A.* The program of work must include six one-semester seminars or courses which usually will be chosen from the group of seminars and courses listed below. Before final approval of the master's paper, each candidate must pass a written examination in statistics. The final oral examination, one hour in length, deals with the master's paper and related topics.

*Program and Examinations for the Ph.D.* Ph.D. candidates are expected to devote a large portion of their time to supervised research. In the first year, the research is done under the close supervision of the candidate's faculty adviser. A written report of the year's research activities (the form and content of which are determined by the candidate and his or her adviser) is submitted to the department, and an oral presentation based on the report is made to the faculty and graduate student members of the department. In addition to research, candidates, in their first two years of residence, usually take the six one-semester graduate courses listed below (or if they elect to do so, a written examination in the subject matter instead of any one or all of the courses). The preliminary examinations, which should be taken early in the third year, consist of three written-area examinations of four hours each and a paper which either synthesizes a major area of research in psychology or develops a theoretical analysis of a major problem or issue in psychology. The three area examinations must be completed within four weeks; the entire set of examinations (including the paper) must be completed within six months. The three four-hour examinations are in the following areas: learning and motivation, physiological psychology (neuroscience), social psychology, cognitive processes or, with the approval of the department, in two of these areas and in one allied subject. (The area of comparative psychology as such is not represented in a separate examination; comparative issues are treated in each of the other area examinations.) The topic of the paper is developed initially by the student and her or his adviser and submitted to the department for approval.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## GRADUATE COURSES

Mr. Gonzalez  
*Learning Theory*

Mr. Hoffman  
*Statistics*

Mr. McCauley  
*Experimental Social Psychology*

Mr. Thomas  
*Physiological Psychology*

Mr. Yarczower  
*Comparative Psychology*

## SEMINARS

Seminars are offered periodically on specialized topics in the areas of experimental, cognitive, comparative, developmental, physiological, and social psychology. Among those offered most recently are the following: *Emotion, The Limbic System, Neurophysiology of Learning, Physiological Techniques and Instrumentation, Psychopharmacology, Comparative Neuroanatomy, Sensory Processes, Measurement and Test Theory, Advanced Topics in Learning Theory, Current Problems in Pavlovian Conditioning, Psycholinguistics, Cognitive Processes.*

## SELECTED UNDERGRADUATE COURSES

- 301 *Emotion*: Mr. Yarczower  
305 *Psychological Testing*: Mr. McCauley  
393 *The Comparative Psychology of Learning*: Mr. Gonzalez  
395 *Psychopharmacology*: Mr. Thomas  
397 *Laboratory Methods in Neural and Behavioral Sciences*: Mr. Thomas  
398 *Cognitive Issues in Personality and Social Psychology*: Mr. McCauley

## Russian

*Professor*: Dan E. Davidson, Ph.D.

*Associate Professors*: Anna Ljunggren, Ph.D.  
George S. Pahomov, Ph.D., *Chairman*

*Assistant Professor*: Nina M. Baranova, Ph.D.

*Professor of Philosophy*: George L. Kline, Ph.D.



*Prerequisites.* An undergraduate major in Russian or an equivalent preparation with some work in literature. Applicants should submit a brief biography written in Russian and at least one essay written in English on a literary topic. The English essay may have been written for an advanced undergraduate course or graduate seminar previously taken.

*Allied Subjects.* Another language or literature, economics, Russian history, linguistics, political science, Russian philosophy.

*Language requirements.* For the M.A., French or German. For the Ph.D., French, German, and one Slavic language other than Russian. Language skills will be tested by examinations administered by the department. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* Six units of work in Russian or in Russian and an allied field. The final examination consists of a three-hour written examination and an oral examination of one hour.

*Examinations for the Ph.D.* The preliminary examinations consist of four four-hour field examinations, one of which must be taken in an allied field, and an oral examination. The final examination will be devoted to the dissertation and the field in which it has been written.

Students are encouraged to study and do research abroad whenever appropriate and feasible. Opportunities for graduate study are provided under the terms of exchange agreements between ACTR, Bryn Mawr College, and the Pushkin Institute of the Russian Language in Moscow.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20–22.

## SEMINARS AND GRADUATE COURSES

Seminars offered each year are selected in accordance with the needs and interests of the students enrolled. Normally the same seminar is not given in two successive years. In cooperation with the Department of Slavic Languages of the University of Pennsylvania, the student may also register at that institution

under the Reciprocal Plan (see page 17) for two units of work chosen from the graduate courses offered in Slavic. Undergraduate 300-level courses, with additional work, may also be offered for graduate credit.

Mr. Davidson

*Karamzin and the Alexandrine Epoch*  
*Old Russian Literature*  
*Russian Language: Structure and Methodology*  
*Russian Versification*  
*Leo Tolstoy*  
*Second Language Acquisition: Theory and Problems*

Ms. Ljunggren

*Symbolism, Futurism, Acmeism*  
*Poetics of Short Narrative Fiction*  
*Russian Modernism*  
*The Art of Vladimir Nabokov*  
*A.S. Pushkin*  
*Literary Theory*

Mr. Pahomov

*A.P. Chekhov*  
*Classics of Russian Drama: Fonvizin to Chekhov*  
*Russian Romanticism*  
*The Russian Short Story*  
*Turgenev and Goncharov*

Mr. Kline

*Theory and Practice of Literary Translation*

### SELECTED UNDERGRADUATE COURSES

303, 304 *Twentieth-century Russian Literature*  
305, 306 *Advanced Stylistics and Composition*  
307, 308 *Russian Prose and Poetry of the Nineteenth Century*  
333, 334 *Russian Philosophy*  
406 *Poetics of Russian Verse*

# Spanish

*Professors:* Willard F. King, Ph.D.  
Eleanor K. Paucker, Ph.D.

*Associate Professor:* Enrique Sacerio-Garí, Ph.D., *Chairman*

*Prerequisites.* An undergraduate major in Spanish (or the equivalent) which includes representative reading from both Spanish American and Peninsular Spanish literature. Applicants for admission in Spanish are asked to submit scores on the Aptitude Test of the Graduate Record Examinations. They should submit one essay written in Spanish for an advanced undergraduate course and are strongly advised to arrange for a personal interview with a member of the department.

*Major and Allied Subjects.* Students may specialize in any period of Spanish or Spanish American literature. All Ph.D. candidates must complete one course in the history of the Spanish language. The following allied subjects are accepted: any literature, ancient or modern; European or Spanish American history; classical or Romance philology; history of art.

*Language Requirements.* For the M.A., either German or one Romance language other than Spanish. For the Ph.D., German and French; in special cases the department may accept other languages. Language skills will be tested by examinations administered by the department. Entering students may offer scores of the GSFLT taken within twelve months of the date on which they begin graduate work at Bryn Mawr.

*Program and Examination for the M.A.* The program consists of six units of graduate work in Spanish or four units of graduate work in Spanish and two others in an allied field. An M.A. paper on a topic related to the work in one of the seminars is required.

The final examination consists of a three-hour written section and an oral of one hour, both in Spanish.

*Program and Examinations for the Ph.D.* Students must complete a minimum of twelve units of graduate work, three of which may be in an allied subject. The preliminary examinations consist of four tests written in Spanish on both Spanish and

Spanish-American topics and an oral examination. Suitable fields for these examinations are to be selected by the student with departmental consultation and approval. The final examination is oral and devoted to the dissertation and the field in which it has been written.

*General Degree Requirements for the M.A. and the Ph.D.* See pages 20-22.

## SEMINARS

The seminars are arranged to allow the widest possible choice for students over a two- or three-year period of study. Four to six seminars are offered each year. Normally the same seminar will not be given two years in succession.

Mrs. King

*Ideological Currents in Renaissance Spain*

*Cervantes*

*The Spanish Novel of the Sixteenth and*

*Seventeenth Centuries*

*Seventeenth-century Drama*

*Modern Drama*

*Critical Approaches to Literature*

Mrs. Paucker

*Spanish Romanticism*

*The Urban Novel in Spain*

*Unamuno and Machado*

*The Novel of the Mexican Revolution*

*Gacho Literature*

*Stylistics and Advanced Syntactic Analysis*

Mr. Sacerio-Garí

*Chroniclers of the New World:*

*Borges and His Precursors*

*The New Latin American Novel*

*Modern Latin American Poetry*

*Avant-garde Literature: Theory and Practice*

*Alejo Carpentier: estructura de lo real maravilloso*

Members of the Department

*The History of the Spanish Language*

*Topics in Medieval Literature*

*Topics in Golden Age Poetry*

## SELECTED UNDERGRADUATE COURSES

- 302      *Medieval Spanish Literature:* Mrs. Paucker  
303      *The Modern Novel in Spain:* Mrs. King  
307      *Cervantes:* Mrs. King  
308      *Spanish Drama of the Golden Age:* Mrs. King  
350      *Masters of the Short Story:* Mr. Sacerio-Garí  
370      *Introduction to Hispanic Linguistics*

Appropriate graduate seminars at the *Centro de Estudios Hispánicos en Madrid* may be included in the program for the M.A. or the Ph.D. (see page 19).



# Additional Programs in Arts and Sciences

The following departments and programs do not offer graduate courses, but their upper-level undergraduate courses may, with additional work, be taken for graduate credit.

Economics

*Chairman:* Helen Hunter

German

*Chairman:* Nancy Dorian

Growth and Structure of Cities

*Chairman:* Barbara Lane

History of Religion

*Chairman:* Samuel Lachs

Italian

*Chairman:* Nicholas Patruno

Music

*Chairman:* Isabelle Cazeaux

Political Science

*Chairman:* Marc Ross

Sociology

*Chairman:* Robert E. Washington

## **Tuition and Fees**

See Appendix B.

## **Students' Rights and Responsibilities**

### **Equality of Opportunity**

Bryn Mawr College does not discriminate on the basis of race, color, national or ethnic origin, religion, sexual preference, age, or handicap in the administration of its educational policies, admission policies, scholarship and loan programs, and athletic and other College-administered programs, or in its employment practices.

In conformity with the Civil Rights Act of 1964, as amended, it is also the policy of Bryn Mawr College not to discriminate on the basis of sex in its educational programs, activities, or employment practices. The admission of only women in the Undergraduate College is in conformity with a provision of the Act. Inquiries regarding compliance with this legislation and other policies regarding non-discrimination may be directed to the Equal Opportunity Officer who administers the College's procedures, Taylor Hall.

### **Family Educational Rights and Privacy Act of 1974**

The Family Educational Rights and Privacy Act of 1974 was designed to protect the privacy of educational records, to establish the right of students to inspect and review their educational records, and to provide guidelines for the correction of inaccurate or misleading data through informal and formal hearings. Students have the right to file complaints with the Family Educational Rights and Privacy Act Office (FERPA), Department of Education, 5411 Switzer Building, 330 C Street S.W., Washington, DC 20201, concerning alleged failures by the institution to comply with the Act.

Questions concerning the Family Educational Rights and Privacy Act may be referred to the Office of the Graduate Dean.

## Designation of Directory Information

Bryn Mawr College hereby designates the following categories of student information as public or "directory information." Such information may be disclosed by the institution for any purpose, at its discretion.

- Category I    Name, address, dates of attendance, class
- Category II    Previous institution(s) attended, major field of study, awards, honors, degree(s) conferred
- Category III    Date of birth
- Category IV    Telephone number
- Category V    Marital status

Currently enrolled students may withhold disclosure of any category of information under the Family Educational Rights and Privacy Act of 1974 by written notification which must be in the Office of the Registrar, Taylor Hall, by 5 p.m. on the second Friday in September. Forms requesting the withholding of "Directory Information" are available in the Office of the Registrar.

Bryn Mawr College assumes that failure on the part of any student specifically to request the withholding of categories of "directory information" indicates individual approval for disclosure.

## Exclusion or Non-Continuation

In the case of unsatisfactory work, unsatisfactory progress toward the degree, or failure to pass the requirements for the M.A. or Ph.D. in timely fashion, the department may recommend the non-continuation or exclusion of a student to the dean of the Graduate School of Arts and Sciences who will notify the student of the decision. A decision not to continue or to exclude a student means that the academic programs and services of the College are no longer open to that student except in cases where the student is admitted, through the regular procedures, to another department.

If the student wishes to appeal the decision, the Council of the Graduate School of Arts and Sciences (including the president)

will hear the student and the department; the decision of the Council of the Graduate School of Arts and Sciences and the president will be binding.

Successful completion of an M.A. at Bryn Mawr College does not insure departmental approval for continuation in graduate work toward the Ph.D.

A student whose behavior disrupts the normal conduct of academic affairs within or beyond his or her department may be excluded by the dean, in consultation with the student's department. If the student wishes to appeal the decision, a committee constituted of no fewer than five persons, to include faculty members of the Council of the Graduate School of Arts and Sciences and representatives of the Graduate Student Association, will hear the student, the chairman of the department, and the dean. The committee will make its recommendations to the president; the president's decision will be binding.

In cases of exclusion during an academic year, fees will not be refunded or remitted in whole or in part; fellowships, scholarships, and assistantships will be cancelled.

## **Student Responsibilities**

Students are responsible for the fulfillment of all requirements indicated in this catalogue, including those of the departments in which they are enrolled. They should also consult the Graduate School bulletin boards for particular deadlines and should read carefully any information sheets which are distributed at registration time.

## **Grievance Procedure**

A grievance procedure has been established for graduate students in Arts and Sciences at Bryn Mawr. The Grievance Committee is chaired by the dean of the Graduate School, who will supply copies of the procedure description upon request. The committee is composed of the dean, three members of the Graduate Council, and three student members selected by the Graduate Student Association.

# **Financial Aid and Merit Awards**

## **Application**

Applications for admission with financial aid and for financial aid for continuing students must be filed in accordance with the deadlines indicated in the calendar printed in this catalogue. New foreign student applications, in the case of individuals whose native language is other than English, must include scores of the Test of English as a Foreign Language (TOEFL) or the examination of the English Language Institute of the University of Michigan.

## **Graduate and Professional School Financial Aid Service**

The Graduate School of Arts and Sciences is a participant in the Graduate and Professional School Financial Aid Service (GAPSFAS), administered by the Educational Testing Service, Princeton, New Jersey 08541. All applicants for financial aid (whether fellowship, tuition award, or assistantship) must file a GAPSFAS form if they are U.S. citizens or permanent residents. Copies of the form are available locally in most colleges and universities or may be obtained by writing directly to Princeton. The completed form must be returned to the GAPSFAS office in Princeton by January 15. Note that information derived from these reports is not revealed to students' departments and in most instances does not affect the likelihood of receiving an award or an assistantship, but the ratings must be available to the College for certain loan programs and other purposes.

## **Fellowships and Scholarships**

Fellowships and scholarships for work leading to the M.A. and Ph.D. are provided from the general funds of the College, from the gifts of alumnae/i, other generous donors, and from private foundations.

While students doing good work may expect continuity of support, there is an annual awards process and continuing as well as new students must submit a financial aid application each year. Upon recommendation from the individual departments in each case, the final decisions are then made by the



Committee on Graduate Awards, a faculty committee of the Graduate School of Arts and Sciences.

Fellowships grant a stipend and tuition (full or partial, as appropriate). Scholarships grant tuition (full or partial, as appropriate). In making its decisions concerning continuing students, the Committee on Graduate Awards considers satisfactory rate of progress an integral component of merit.

Merit constitutes the primary criterion for Bryn Mawr College fellowships and scholarships, although relative financial need may be considered in the case of partial tuition scholarships and may affect the level of a fellowship stipend. When fellowships or scholarships carrying full tuition are awarded, it is assumed that the recipients will be concentrating fully on their graduate work and should expect to register for the full complement of six units in that year unless a lesser program has been approved by their department or specified in the letter of award.

## Teaching and other Assistantships

Applicants to and continuing students in the Graduate School of Arts and Sciences wishing financial aid will be considered not only for fellowships and scholarships but also for teaching and graduate assistantships. The duties connected with these appointments differ from department to department; in the sciences, teaching assistants assist in the laboratory sections.

The Phebe Anna Thorne School for pre-school children, operated in conjunction with the Department of Human Development, annually appoints three assistant teachers from amongst the department's graduate students. In addition, traineeships in school psychology, with stipends, are offered annually in the Child Study Institute affiliated with the department.

Research assistantships are frequently available in certain departments.

All assistants are expected to maintain good academic standing during their terms of appointment. In cases of academic exclusion (page 90) or non-fulfillment of duties, assistantships are cancelled.

# Fellowship and Scholarship Funds and Prizes

Among the special funds generously provided to Bryn Mawr College to assist in the support of graduate students in Arts and Sciences are the following:

*Alumnae Regional Scholarship Committee Grants*, from the Regional Committees of Cambridge, Massachusetts; New Haven, Connecticut; Princeton, New Jersey; Eastern Pennsylvania and Philadelphia; and Washington, D.C.

*The Warren Akin IV Scholarship Fund for Graduate Students in English*, established in 1984 as a memorial to Warren Akin IV, Ph.D. 1975.

*The Marion Louise Ament Fellowship Fund*, established in 1966 for graduate and undergraduate fellowships in Spanish in honor of Marion Neustadt, Class of 1944.

*The Alice Gibson Brock Fellowship Fund*, established by bequest in 1964, for the support of graduate fellowships.

*The Elizabeth Eaton Butterfield Fund*, established in 1978 for the support of graduate students as a memorial to Mrs. Butterfield, Class of 1935, founder and for many years president of the Bryn Mawr Book Sale of Cambridge, Massachusetts.

*The Henry Joel Cadbury Fellowship Fund in the Humanities*, established in 1973 in honor of Henry Joel Cadbury, trustee emeritus of the College, to provide support for advanced graduate students in the humanities.

*The Doris Sill Carland Prizes for Excellence in Teaching*, established in 1986 to recognize graduate students who make outstanding contributions as teaching assistants in the College.

*The Bertha Reed Coffman Fellowship Fund*, established in 1964 for graduate student support by bequest of Bertha Reed Coffman, a teaching fellow at the College in 1906-07.

*The Elsie Lush Funkhouser Delafield Scholarship Fund*, established in 1968 for graduate students in fields other than the arts

who are judged most likely to use their talents for the country's benefit.

*The Barbara Cooley McNamee Dudley Fund*, established as a Centennial gift in honor of Barbara Cooley McNamee Dudley, Class of 1942, for aid to graduate and undergraduate students from foreign countries.

*The Theodore N. Ely Fund*, established in 1957 by bequest of Katrina Ely Tiffany, Class of 1897, to provide a fellowship or scholarship in archaeology or history of art. Awarded by the departments.

*The Folly Ranch Fund*, established in 1974 in honor of Eleanor Donnelley Erdman, Clarissa Donnelley Haffner, and Elizabeth P. Taylor, Class of 1921, and Jean T. Palmer, Class of 1924. The income is used for both graduate and undergraduate support.

*The Grace Frank Fellowship Fund*, established in 1979 in memory of Grace Frank, who taught French at Bryn Mawr from 1936 to 1951; the income is used to support fellowships for graduate students in the humanities.

*The Margaret Gilman Fund*, established in 1958 by bequest of Margaret Gilman, late professor of French at Bryn Mawr, for fellowship support in French.

*The Howard Lehman Goodhart Fund*, for the support of advanced graduate students in medieval studies.

*The Emma and Fritz Guggenbuhl Fund in Mathematics*, established in 1987 by bequest of Laura Guggenbuhl, M.A. 1924, Ph.D. 1927, to provide scholarships for students in the Department of Mathematics of the graduate school.

*The Marguerite Bartlett Hamer Fund*, established in 1979 by bequest of Marguerite Bartlett Hamer, A.B. 1913, M.A. 1915, to support graduate students in history.

*The Nora M. Healy Scholarship Fund*, established in 1984 in memory of Nora M. Healy, mother of Margaret M. Healy, Ph.D. 1969, and Nora T. Healy, M.S.S. 1973. The income is to be used for graduate students in Arts and Sciences or Social Work and Social Research.

*The Helen Schaeffer Huff Memorial Research Fellowship Fund*, established to support a year of research work in physics or chemistry at Bryn Mawr, with preference given (other qualifications being equal) to a field of research which overlaps chemistry and physics. Candidates who have not completed the work for the doctorate may exceptionally be considered, but the Huff Fellowship is normally awarded for post-doctoral work.

*The Wheeler and Florence DeG. Jenkins Scholarship Fund*, established in 1981 for graduate and undergraduate students in mathematics or physics.

*The Anne Cutting Jones and Edith Melcher Fund*, established in 1972 from the estates of Anne Cutting Jones (Ph.D. 1925) and Edith Melcher (A.B. 1923, M.A. 1924, Ph.D. 1928), for the support of both undergraduate and graduate students in French.

*The Pauline Jones Scholarship Fund*, established in 1985 in honor of Pauline Jones, A.B. 1935, Ph.D. 1964, and Professor Emeritus of French, for graduate and undergraduate awards in French.

*The S. Maude Kaemmerling Fund*, established by bequest in 1959, for graduate fellowships and scholarships.

*The Louise Kingsley Fund*, established in 1972 by bequest of Louise Kingsley, Ph.D., 1931, for graduate fellowships and scholarships.

*The Melodee Siegel Kornacker Fellowship Fund for Science*, established in 1976, by Melodee Siegel Kornacker, Class of 1960, with the income to be used for graduate fellowships in biology, chemistry, geology, physics, or psychology.

*The Samuel H. Kress Foundation Fellowship*, awarded annually by the Department of History of Art to an advanced graduate student in that field.

*The Mabel Gibson La Foy Fund*, established in 1975 by Margaret La Foy Rossiter (M.A. 1938, Ph.D. 1941) in honor of her mother, to provide support for part-time students, with preference given to women students.

*The Elizabeth R. Laird Fund*, established in 1969 by bequest of Elizabeth R. Laird, Ph.D. 1901, for graduate student support.

*The Katherine Elizabeth McBride Fellowship Fund*, established by alumnae of the College in honor of Katherine McBride, president of Bryn Mawr from 1942 to 1970; the fellowship is awarded to a candidate for the Ph.D. in any department who is about to complete two or more years of graduate work.

*The Emmy Noether Fellowship Fund*, made possible by gifts from many donors in memory of Emmy Noether, who came to Bryn Mawr from Germany in 1933 and died in 1935; the fellowship is to be awarded by the Department of Mathematics for advanced graduate students in mathematics and, subject to the approval of the department, may be used at any institution in the United States or in a foreign country.

*The Bertha Haven Putnam Fellowship Fund*, established in 1960 to support graduate work in history.

*The Max Richter Fellowship Fund*, established in 1962 and increased in 1965 through gifts from the Richter Memorial Foundation, to provide support to advanced students interested in public affairs; it may be used to fund dissertation research overseas.

*The Helen G. Stafford Memorial Fund*, established in 1974 by bequest of Helen G. Stafford, Ph.D. 1935, for the support of graduate students in history.

*The Mildred Clarke Pressinger von Kienbusch Fund*, established in 1977 by the Class of 1909 in honor of Mildred von Kienbusch, for the support of graduate students working toward the doctorate.

*The Mildred and Carl Otto von Kienbusch Fund*, established in 1977 by bequest of Carl Otto von Kienbusch, for the support of graduate students working toward the doctorate.

*The Fund for the Coordination of the Sciences*. Departments in the natural sciences and the Department of Mathematics administer a Fund for the Coordination of the Sciences, given to the College in 1935 by the Carnegie Corporation of New York. Its purpose is to encourage and facilitate teaching and research in fields such as biochemistry, biophysics, geochemistry, geophysics, and psychophysics. From this fund, the Committee for the Coordination of the Sciences awards fellowships, assistant-



ships, postdoctoral research fellowships, summer stipends for graduate students, or other grants as appropriate.

*Whiting Fellowships in the Humanities* are made possible through the generosity of the Mrs. Giles Whiting Foundation. Whiting Fellowships are awarded competitively to a select number of graduate students in the humanities in their final dissertation year. These fellowships provide a generous stipend and dissertation tuition.

## Traveling Fellowships and Awards

Recipients of awards supported partially or fully by the funds listed in the preceding section may in some instances use the awards away from the College; for example, Whiting or Richter Fellows may travel for research purposes during their fellowship year. The following awards and fellowships, however, are specifically or primarily designated for the purpose of travel or study abroad:

*The Bryne-Rubel Fund* was established in 1973 by the estate of Eva W. Bryne, B.A. 1916, M.A. 1917, and Ph.D. 1925. The income of the estate may be used to fund one or more one-year fellowships in English, Latin, Greek, or archaeology for graduate students at Bryn Mawr for study outside the United States. Bryne-Rubel funds may also be used for graduate students in English or Latin at Bryn Mawr.

*The Samuel and Lucy Chew Fund* was established in 1983 by bequest of Lucy Evans Chew, A.B. 1918, to support graduate student travel for the purposes of research and study.

*The Christopher Fund* was founded by an anonymous donor in 1977. The income is to be used for travel costs of graduate students in classical and Near Eastern archaeology studying in the Mediterranean.

*The Anna Ottendorfer Memorial Research Award* in Teutonic philology and German language and literature, founded in 1907 by Mrs. Anna Woerishoffer in memory of her mother, is to be applied to the expense of study or research for up to one year at a German university. The deed of gift restricts this award to

women students who have completed at least one year of graduate study at Bryn Mawr.

*The Ella Riegel Fund for Classical Archaeology* was established in 1938 by bequest of Ella Riegel. The awards are made by the Department of Classical and Near Eastern Archaeology to advanced students in that field. The awards are normally given for study abroad but at the discretion of the department may be used at Bryn Mawr College.

*The Fanny Bullock Workman Travelling Fellowship* for a year of study or research abroad was established in 1927 by bequest of Fanny Bullock Workman and by gift of her husband, Dr. W. Hunter Workman. It is awarded to a candidate for the degree of Doctor of Philosophy at Bryn Mawr College who could not have the advantages of such a year without assistance. The fellowship for any one year may be divided between two students, or the same student may hold the fellowship for more than one year.

In addition to the named awards described, the Graduate School of Arts and Sciences is on occasion able to make small grants to individual graduate students to enable them to travel for the purpose of delivering papers at scholarly conferences or for limited research purposes. Proposals for such grants should be submitted, in written form, to the dean of the Graduate School of Arts and Sciences.

## Fellowships for Foreign Students

In addition to the regular Bryn Mawr College graduate fellowships, there are two special fellowship categories for non-United States citizens or students whose native language is other than English.

*The Marguerite N. Farley Fellowships* provide tuition and a stipend to cover living expenses and are competitively open to students from any country outside the United States.

*Special Foreign Language Fellowships* provide tuition and a stipend to cover living expenses and are open to students whose languages form a part of the Bryn Mawr undergraduate curriculum. Languages meeting this requirement are Chinese, French, German, Hebrew, Italian, Russian, and Spanish. Holders of

these fellowships are asked to devote four or five hours a week to supervised teaching or other assistance in the appropriate language department. Holders of the fellowships may be working toward a graduate degree in any department. Normally only two such fellowships are awarded in any one year, rotating among the language departments in accordance with the merit of the applications. When a Special Foreign Language Fellowship is awarded in French, it is designated the Marcelle Pardé Fellowship, in memory of the Resistance heroine who was a member of the French Department of Bryn Mawr College from 1919 to 1929. When a Special Foreign Language Fellowship is awarded in Spanish, it is designated the Miguel Catalan Fellowship, in memory of the distinguished Spanish physicist and friend of Bryn Mawr.

These are one-year merit fellowships, awarded by the Committee on Graduate Awards on the basis of departmental recommendations. Farley Fellowships are rarely awarded to the same individual more than once. Special Foreign Language Fellowships may in some instances be awarded to the same individual in two successive years. Foreign students may also compete for the various forms of financial aid available to all graduate students. Both new and continuing students must submit a financial aid application for consideration each year.

## **Duties and Responsibilities of Fellows**

Fellowships are awarded to enable meritorious graduate students to make substantial progress toward their advanced degrees. Fellows are required to carry a full program of academic work unless a lesser program has been approved by their department or specified in the letter of award. All Bryn Mawr College Fellows are occasionally asked to perform some small service which contributes to the graduate program.

## **Honorary Fellowships and Prizes**

*The Marion Edwards Park Fellowship*, an honorary fellowship, is awarded from time to time by the Committee on Graduate Awards on the recommendation of a student's department.

*The Susan B. Anthony Memorial Prize*, commemorating the great work of Susan B. Anthony for women, was founded by her

friend, Anna Howard Shaw, and her niece, Lucy E. Anthony. It is awarded from time to time to a graduate student at Bryn Mawr College who has published, or submitted in final form for publication, the best study dealing with the industrial, social, economic, or political position of women. The award is made by a committee of which the president of the College is chairman.

## Loan Funds

The Office of Financial Aid in Taylor Hall (Director: Jerry Berenson) should be consulted about loan needs and can provide additional information concerning all of the loan programs listed here.

*Perkins Loan.* These loans are available to students who are United States citizens or permanent residents and who are registered for at least *four* units of graduate work. Application is made on a special form which can be obtained from the Office of Financial Aid in Taylor Hall after a student has been admitted to the Graduate School of Arts and Sciences. The application and the GAPS FAS form (see page 92) must be filed by June 1. Allocation of loan funds is made during the summer.

*Guaranteed State Loan Program.* Students are encouraged to apply for Guaranteed State Loans, available to United States citizens or permanent residents who are studying at least half-time, through their local banks. Part of the application is completed by the Office of Financial Aid, Taylor Hall.

*The Students' Loan Fund of the Alumnae Association of Bryn Mawr College* was established by the Class of 1890 for the use of students who need to borrow money in order to continue their college work. The fund is managed by the Alumnae Scholarships and Loan Fund Committee. Loans may be used for purposes approved by the committee, who try to provide small loans to meet special emergencies or to help with tuition payments. As a rule, money is not lent to students in their first semester of graduate work. No more than \$1000 may be borrowed by a student in any one year. The total for four years must not exceed \$3000. While the student is in college, no interest is charged; after the student leaves college the interest

rate is modest. The entire principal must be repaid (annual payment) within five years from the time the student leaves college. Students who wish to borrow from the Loan Fund may obtain application blanks for this purpose from the Office of the Graduate School of Arts and Sciences.

*U.S. Steel Foundation Graduate-level Loan Program.* The U.S. Steel Foundation has established a fund for loans to graduate students in anthropology, biology, biochemistry, chemistry, human development, geology, history, physics, political science, psychology, and sociology. Small loans may be made to cover expenses in connection with tuition, books, research equipment, living expenses, travel, summer research. Conditions are the same as for the Alumnae Association Loan Fund, see above. Applications are made through the Office of Financial Aid in Taylor Hall.

## **Campus Employment Opportunities**

There are a limited number of part-time work-study employment opportunities available on campus, primarily in the library and certain offices. Application forms may be obtained in the Office of Financial Aid in Taylor Hall. Graduate students, however, may also apply for part-time campus staff positions, for which notices are posted on bulletin boards through the campus. The Personnel Office in Cartref can supply further information and maintains an applicant file. The dean of the Graduate School of Arts and Sciences also keeps a listing of job openings on campus.

## **Career Development Office**

Graduate students are invited to make use of the services of the Career Development Office. These services include counseling on career interests and concerns; information on specific openings for summer, temporary and permanent, full-and part-time positions; internships and an annual career panel series; work-



shops and consultation on job search methods. The Career Development Office also offers a comprehensive credentials service for students and alumnae/i.

## **Foreign Student Adviser**

The Foreign Student Adviser is located in the Student Services Office in the Campus Center. The office provides assistance with visas and general orientation.

## **Graduate Student Association**

The Graduate Student Association is the instrument through which graduate students may voice their concerns and needs to the faculty and administration. When appropriate, the G.S.A. also initiates and carries out specific programs to meet these needs.

Representatives of the Graduate Student Association sit on various College committees, including the Council of the Graduate School of Arts and Sciences and the committees concerned with the library and with academic computing facilities. In addition, the Graduate Student Association is represented at meetings of the Board of Trustees and at faculty meetings. The G.S.A. also plays a role in establishing policies and procedures related to graduate housing at Glenmede.

## **Graduate Student Housing**

Housing is available for about forty graduate students at Glenmede, the graduate residence center, which is approximately one-half mile from the main campus. The Glenmede complex includes a main house, with fourteen single rooms and three large double rooms, and additional single rooms (and one double) in the smaller houses on the estate. The College provides basic furniture, but students must supply their own linen, bed pillows, desk lamps, rugs, and curtains.

There is no food service at Glenmede. Residents can take advantage of the kitchen facilities available in each of the buildings at Glenmede, or can purchase meal tickets, or contract for the complete meal plan for the College dining halls on campus.

Room application forms are mailed in the spring to those who have indicated interest in College housing on their admission applications. The number of rooms available varies from year to year. Once a room is assigned, a contract must be signed and returned to the Office of Student Services, Campus Center, with a deposit. The deposit will be deducted from the residence fee; it will be refunded only if the student cannot be accommodated.

A student who has reserved a room will be held responsible for the full residence charge unless notice of withdrawal is sent in writing to the Student Services Office by August 15. See the fee schedule for the current room charge, which is payable one half by the first day of classes of the fall semester and one half by the first day of classes of the spring semester. Residence on campus covers the period from the opening of the College in the fall until Commencement Day. Baggage will be accepted at the College after August 20. It should be sent prepaid, addressed to Glenmede, Bryn Mawr College, and marked with the owner's name.

## Health

### Medical Services

The College maintains a Health Center, with in-patient and out-patient services, open during the academic year but closed in the summer. Out-patient, physician, and nursing services are provided without fee for full-time students who have enrolled in the health insurance program offered through the College. Full-time students not enrolled in the program can receive services for a fee. If medication, tests, special consultation, or private nursing care is necessary, the student must meet the expense. The College reserves the right to require a student to withdraw, for reasons of health, upon the recommendation of the College physician.

A counseling service is available to all students. Consultation with a psychological social worker, psychologist, or psychiatrist should be arranged by appointment through the Health Center secretary. Counselors can be reached through the Health Center

in cases of emergency. Should long-term therapy be necessary, the student is referred to outside private care.

## **Medical Requirements**

All entering students must file medical history and evaluation forms with the Health Center before registration for classes.

## **Insurance**

All graduate students are strongly urged to carry health insurance. For those who need coverage, student policies are offered and should be purchased in September during the open enrollment period. The College cannot be responsible for medical expenses incurred by graduate students. Foreign students are *required* to carry health insurance valid in the United States.

## **Special Note**

When space permits, the Health Center offers the use of its rooms for temporary overnight stays, without meals or nursing care, for a small charge.

# **Laboratory School**

## **The Phebe Anna Thorne School**

Situated on the Bryn Mawr campus and integral to the Department of Human Development, the Thorne School is a laboratory school which enrolls three- and four-year-olds from nearby communities in creative, pre-kindergarten programs. The school has for its aim the fullest and happiest development of each child within the context of a group and offers morning and afternoon sessions Monday through Friday, September to July. For fees and information, write to or telephone the Director, The Phebe Anna Thorne School, Bryn Mawr College, Wyndon Avenue and Roberts Road, Bryn Mawr, PA 19010, (215) 527-5490.

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Jeremy Blatchey, M.S. (in L.S.) (Drexel University), *Acquisitions Librarian*  
Leo M. Dolenski, M.A. (Catholic University of America), M.S. (in L.S.) (Drexel University), *Manuscripts and Archives Librarian*  
John Dooley, M.L.S. (McGill University), *Bibliographer*  
Florence D. Goff, M.A., M.S. (in L.S.) (Villanova University), *Reference Librarian*  
M. Winslow Lundy, M.A. (Bryn Mawr College), M.S. (in L.S.) (Drexel University), *Rare Book Cataloguer*  
Andrew M. Patterson, M.L.S. (University of Wisconsin), *Reference Librarian*  
Judith E. Regueiro, M.A. (Bryn Mawr College), M.S. (in L.S.) (Drexel University), *Reference Librarian*  
Caroline S. Rittenhouse, Ph.D. (Harvard University), *College Archivist*  
Scott H. Silverman, M.S. (in L.S.) (Drexel University), *Cataloguing Librarian*

## Visual Resources

- Karin Lazarus, M.S.L.S. (University of North Carolina), *Head, Visual Resources*  
Carol Campbell, M.A. (University of Pennsylvania), *Curator and Registrar of College's Collections*



Karl A. Dimler, B.F.A. (Philadelphia College of Art), *Photographer*  
Alena Luter, M.A. (New York University), *Slide and Photograph Librarian*

## **Child Study Institute**

Robert Wozniak, Ph.D. (University of Michigan), *Director*  
Peter Goldenthal, Ph.D. (University of Connecticut), *Coordinator of the Psychotherapy Clinic*  
Katherine Gordon-Clark, Ph.D. (Bryn Mawr College), *Coordinator of the Psychological Assessment Clinic*  
Barbara Lorry, Ph.D. (Bryn Mawr College), *Coordinator of the Psychoeducational Clinic*

## **Phebe Anna Thorne School**

Marilyn Motto Henkelman, M.Ed. (Erikson Institute for Early Education), *Director*  
Patricia Farrell, A.B. (University of Delaware), *Teacher*  
Harriet Heath, Ph.D. (Bryn Mawr College), *Parent Center Coordinator*  
Nadine Heim, M.Ed. (Chestnut Hill College), *Head Teacher*  
Leslie Rescorla, Ph.D. (Yale University), *Consultant*

# **Graduate School of Arts and Sciences**

*Dean:* Catherine Lafarge

*Secretary to the Dean:* Sandy Bernhard

*Candidacy and Degree Coordinator:* Lynn Billington

*Administrative Coordinator for Admissions, Registration and  
Records, and Financial Aid:* Margaret Cook

## **The Council of the Graduate School of Arts and Sciences**

*Dean Lafarge, Chairman*

*President McPherson, ex officio*

*Academic Deputy to the President Shapiro, ex officio*

*Professor Armstrong*

*Professor Berwind*

*Professor Dostal*

*Professor Kinney*

*Professor Pahomov*

*Professor Park*

*Professor Rescorla*

*Professor Silvera*

*Professor Swindell*

## **Committee on Graduate Awards**

*Dean Lafarge, Chairman*

*President McPherson, ex officio*

*Professor R. Davis*

*Professor Pinney*

*Professor Platt*

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## Appendix A: Faculty on Leave

### For the Year 1988-89

Briggs, Peter, *Associate Professor of English*  
 Burlin, Katrin, *Associate Professor of English*  
 Crawford, Maria Luisa, *William R. Kenan, Jr. Professor of  
 Geology*  
 Crawford, William, *Professor of Geology*  
 Karen, David, *Assistant Professor of Sociology*  
 Mallory, Frank, *W. Alton Jones Professor of Chemistry*  
 Martelli, Mario, *Professor of Mathematics*  
 McKim-Smith, Gridley, *Associate Professor of History of Art*  
 Melvin, Paul, *Associate Professor of Mathematics*

For Semester I, 1988-89

Kline, George, *Milton C. Nahm Professor of Philosophy*  
 Ridgway, Brunilde, *Rhys Carpenter Professor of Classical and  
 Near Eastern Archaeology*  
 Salmon, John H.M., *Marjorie Walter Goodhart Professor of  
 History*

**For Semester II, 1988-89**

Caplan, Jane, *Associate Professor of History*  
Levine, Steven, *Professor of History of Art*

## Appendix B: Fees 1988-89

These fees are in effect for the academic year 1988–89. Faced with the rising costs of higher education, the College has had to raise tuition (and some of its fees) in recent years. An application fee of \$30 is required.

## Tuition

Full-time students:

|  |          |
|--|----------|
| 6 academic units<br>(3 courses per semester) | \$11,100 |
|--|----------|

Part-time students:

|  |         |
|--|---------|
| 4 academic units<br>(2 courses per semester) | \$7,400 |
|--|---------|



|   |         |
|---|---------|
| 2 academic units<br>(1 course per semester)         | \$3,700 |
| 1 academic unit<br>(1 semester course)              | \$1,850 |
| Continuing Enrollment<br>per semester (see page 16) | \$ 325  |

#### Auditors:

Fees for auditors are the same as those for students registered in courses for credit.

Bryn Mawr alumnae/i who have received one or more advanced degrees from Bryn Mawr College (M.A., M.S.S., M.L.S.P., Ph.D.) are entitled to take up to four units of work (four semester seminars) at one-half the normal tuition, subject to the following provisions:

1. Admission to all seminars must follow approved admission procedures.
2. Specific seminars are open on a space-available basis.
3. Full tuition must be paid if the course is to be counted toward an advanced degree from Bryn Mawr College.

## Payment of Fees

Tuition for each semester must be paid by the first day of classes or at the time of registration. Graduate students living at Glenmede, the graduate residence center, will be billed in advance of each semester and must pay for their rooms before the semester begins, or arrange for deductions to be made from their stipends. Penalties may be charged for late fees, and students whose fees are not paid will not be permitted to continue in residence or to attend classes. Degrees will not be awarded to any student owing money to any College facility nor will any transcripts be issued. Questions concerning the payment of fees should be directed to the Office of the Comptroller.

## Contingent Fees or Expenses

|  |           |
|--|-----------|
| Application fee .....                                  | \$30      |
| Room in graduate student residence .....               | \$2,930   |
| Infirmary charge (includes limited insurance coverage) | \$200     |
| Health insurance (foreign students-mandatory) ....     | \$240-480 |
| Late registration fee .....                            | \$15      |

|  |      |
|--|------|
| Add and drop fee .....                           | \$15 |
| (after the second week of a new semester)        |      |
| Graduation fee for all graduate degrees .....    | \$50 |
| Charge for microfilming Ph.D. dissertation ..... | \$65 |

## Meals

Students wishing to eat in the College dining halls on the main campus may buy meal tickets. Students living at Glenmede, the graduate residence center, can either prepare their own meals in the kitchen facilities which are provided in each residential unit at Glenmede, or buy individual meal tickets, or contract for the full meal plan for the College dining halls on the main campus. In 1988-89 the full meal plan is \$2,000 for the academic year.

## Refund Policy

In the event of withdrawal from the Graduate School of Arts and Sciences, refunds will be made according to the following schedule:

- During the first and second weeks of the semester: 75%
- During the third through sixth weeks of the semester: 50%
- After the sixth week of the semester: no refund

For students living at Glenmede, the graduate residence center, the charge for residence is \$2,930 in 1988-89. In the event that a student wishes to leave Glenmede, a partial refund will be made only as and if the college is able to reassign the space to someone else not currently living at Glenmede. Students themselves may not dispose of rooms assigned to them, and a signed room contract is a commitment for the entire academic year.

## Procedure for Securing Refunds

Written notice must be received by the dean at least one week prior to the effective date of withdrawal. Students who have received loans under NDSL or GSL to meet any educational expenses for the current academic year must make an appointment with the loan officer before leaving the campus to arrange for appropriate repayment of the loans in question.

# Directions to Bryn Mawr College

## By Car

### *From the Pennsylvania Turnpike*

Take Exit 24 (Valley Forge Interchange) and follow signs to Route 76-East (Expressway to Philadelphia). After 3 miles, leave Route 76 at Exit 27 (Gulph Mills) and take Route 320-South. Turn left at the first traffic light onto Old Gulph Road. Old Gulph becomes New Gulph after several miles. At the traffic light at the intersection of New Gulph and Morris Avenue, turn right. A parking lot is located beyond the second entrance on your right on Morris.

### *From the New Jersey Turnpike*

If approaching from north of Philadelphia, leave the New Jersey Turnpike at Exit 6 (Pennsylvania turnpike) and drive west on the Pennsylvania Turnpike to Exit 24 (Valley Forge Interchange). From there proceed as advised above.

If approaching from south of Philadelphia, leave the New Jersey Turnpike at Exit 3 (Woodbury-South Camden) and follow Walt Whitman Bridge signs onto Route 168-North. Travel one mile, following signs to Route 295-South. Take 295-South for one mile. Bear left to join Route 76-West, still following Walt Whitman Bridge signs. Take Route 76 across the bridge following Route 76-West signs. As the expressway reaches downtown Philadelphia follow signs to Valley Forge. Take the City Avenue Exit (Route 1-South). Once on City Avenue, travel about two and one-half miles and turn right onto Lancaster Avenue (Route 30-West). Then travel four or so miles to reach the center of Bryn Mawr. Then right onto Morris Avenue (there is an Arco gas station on the right corner). Follow Morris under the train bridge and across Montgomery Avenue. Continue one and one-half blocks past Montgomery and turn left into the College parking lot.

## By Train

From either Philadelphia's Suburban Station or its 30th Street Station, take SEPTA's Paoli Local or Bryn Mawr Local to Bryn Mawr (17-19 minute ride). The trains run from 6:15 a.m. until 12:15 a.m. weekdays and from 7:15 a.m. until 12:15 a.m. weekends. From the Bryn Mawr station, walk east (straight ahead as you get off the train) two blocks and turn left on Yarrow Road. The College stretches to your right and straight ahead. Or make use of the Bennett Taxi Service by calling 525-1770 from the station pay phone.

## By Air

From Philadelphia International Airport, take the Bennett Airport Limousine to the Bryn Mawr Campus (35 to 45 minute ride) or the Airport High Speed Line to either Suburban or 30th Street Stations and use the SEPTA train service to Bryn Mawr. Bennett limousines operate from 7 a.m. until 11:30 p.m. daily. Dispatchers are on duty at all baggage claim areas.









